

モルディブ国

マレ第6初等学校施設建設計画

基本設計調査報告書別冊

平成9年12月

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モルディブ国マレ第6初等学校施設建設計画

基本設計調査

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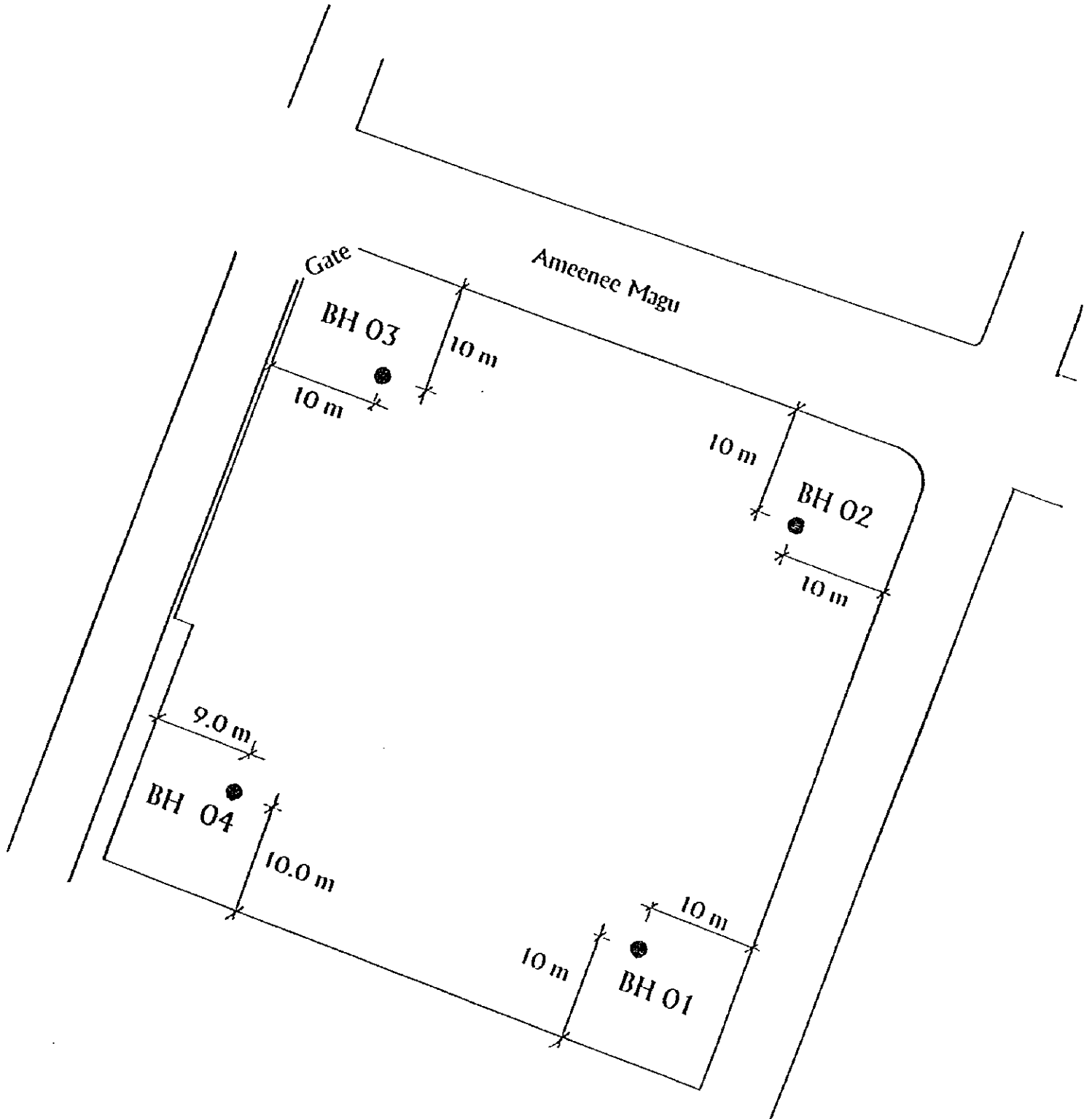
第 1 章 地質調查結果

1-1 ボーリング調査実施位置図

FIGURE 1

APPROXIMATE LOCATION OF BORE HOLES

(Not to Scale)



1-2 ボーリング調査結果報告書

REPORT ON THE SOILS INVESTIGATION

FOR

THE PROPOSED 6TH PRIMARY SCHOOL

AT

AMEENEE MAGU - MALE

REPUBLIC OF MALDIVES

1. ORIGIN

This soil investigation has been entrusted to M/s SOIL ENGINEERING AND DEEPWELLS (PVT) LTD, 14/15, Vajira Road, Colombo 4, Sri Lanka, by Mr. Akira Sugiura, Architect, Mohri Architect & Associates Inc., 2-4-13-4F, Yaesu, Chuo - Ku, Tokyo, Japan.

2. SCOPE

The scope of work was to advance four bore holes at the proposed building site. The depth of bore holes have been limited to a maximum of 10.00 metres. Bore hole locations were decided at the site in consultation with the representative from M/s. Mohri Architect & Associates Inc.,

Standard Penetration Tests were to be performed at every 1.0 metre depth inside the bore holes.

The objective of the soil investigation was to determine the sub surface soil profile and its strength and settlement characteristics for recommending suitable foundations for the proposed 6th primary school buildings.

3. LOCATION

The site is located at Ameenee Magu, in Male, of the Republic of Maldives.

The approximate locations of the bore holes are shown in Figure I.

4. WORK DONE

4.1 GENERAL

A YBM 05 D rotary core drilling machine together with a drilling team has been mobilised for this work from Sri Lanka. Drilling of the first bore hole, BH 01, has been commenced on the 14th of August. Field work has been completed on the 18th August 1997.

All the bore holes have been terminated after conducting Standard penetration tests at 10.0 m below ground level.

Standard penetration tests were conducted at every 1.0 metre depth.

4.2 SAMPLING AND CLASSIFICATION

The subsoil strata were recovered using a split spoon sampler, by other dry blocking methods and by washing. Representative samples were collected at every change of soil type.

The soils were examined visually using a 10 X 1 magnifying lens and classified under the Unified Soil Classification System.

It was not possible to collect undisturbed soil samples in 75 mm diameter thin wall tubes as only granular soils were encountered.

4.3 STANDARD PENETRATION TEST (SPT)

Standard Penetration Tests (SPT) were conducted inside the bore holes in accordance with ASTM D 1586 at every 1.0 metre depth down to the bottom of the bore holes.

'N' values are reported in Pages 7 to 10 in the vertical soil profile.

4.4 WATER TABLE

The water table inside the bore holes has been observed and is reported in the vertical soil profile in Pages 7 to 10.

BH 01	0.72 m below existing ground level
BH 02	0.39 m below existing ground level
BH 03	0.51 m below existing ground level
BH 04	0.91 m below existing ground level

4.5 SOIL PROFILE

Vertical soil profiles are reported in Pages 7 to 10.

Detailed logs of the bore holes are reported in Pages 11 to 18.

4.6 LABORATORY TESTING

Laboratory tests are being conducted on the SPT samples collected in the bore holes. Laboratory test results have been presented in Volume II.

Following laboratory tests are being conducted ;

- Natural moisture content
- Grain size distribution
- Specific gravity
- Sulphate content

Unconfined compression tests cannot be performed in these disturbed granular soil (coral sand) samples.

Chemical analysis of ground water samples shall also be conducted, especially to determine the sulphate content.

4.7 TEMPORARY BENCH MARK

A temporary bench mark has been established on the electrical sub station on the pavement just outside the eastern boundary of the site, near the south eastern corner. Its location is shown in the Survey Plan.

The datum level on the bottom horizontal face on the steel cabin has been assumed to be DL + 10.00 m.

5. DESIGN RECOMMENDATION

Proposed site is situated at Ameenee Magu in Male. It is a square block of around 60 m x 60 m. There is a rectangular warehouse running right across from the western boundary to the eastern boundary covering around 25 metres width strip along the southern boundary. The warehouse is used to stock cement and also LPG cylinders. The other open areas are also used to stock bags of sand and coarse aggregate. There are two more temporary sheds which are being used to stock reinforcement steel bars.

The open areas are fairly flat, but storm water is getting stagnated at the center of the open area. The spot levels of the ground are shown in the site Survey Plan, which has been submitted separately.

The water table in the area has been observed to be quite shallow, i.e. 0.39 m to 0.91 m below the existing ground level.

Four bore holes have been advanced at the proposed building site. All the bore holes have been terminated after conducting the standard penetration tests at 10.0 m below the existing ground level.

Subsoil in the investigated area consists mainly of coral sands and coral fragments. However, in BH 02, a 0.30 m thick layer of partially decayed organic matter has been encountered near the surface. Further, the drilling rods dropped freely from 1.75 m to 1.85 m in BH 01.

All SPT 'N' values have been observed to be over 10 except at 1.0 m & 2.0 m in BH 02 & BH 03.

Subsoil profile in BH 01 and in BH 04 seem to be similar even at shallow depths. Soil layers down to around 2.0 m / 3.0 m in BH 02 & BH 03 appear to be weaker than in BH 01 & BH 04. This may be due to the fact that BH 01 / BH 04 areas have been subjected to better compaction.

Shallow foundations can be recommended for the proposed 4 storeyed building. Safe allowable bearing capacity of shallow strip footings placed at different depths is given in following tables. The water table has been assumed to be at the existing ground level for calculation purposes.

In order to guide the structural design engineer in selecting the most appropriate values, the allowable bearing capacity has been estimated using two factors of safety (F.O.S). Table I corresponds to a F.O.S. of 3.0 while Table II corresponds to a F.O.S. of 2.0.

$$\text{Note : Allowable bearing capacity of} = \frac{\text{Ultimate bearing capacity}}{\text{Factor of Safety}}$$

Table I - Factor of Safety = 3.0

Depth Below Existing Ground Level (m)	Allowable Bearing Capacity (kN/m ²)			
	BII 01	BII 02	BII 03	BII 04
1.0	-	85	60	110
2.0	175	140	110	175
3.0	240	300	275	240
4.0	400	400	375	400

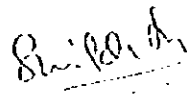
Table II - Factor of Safety = 2.0

Depth Below Existing Ground Level (m)	Allowable Bearing Capacity (kN/m ²)			
	BII 01	BII 02	BII 03	BII 04
1.0	-	125	100	150
2.0	260	205	170	260
3.0	360	480	430	360
4.0	600	600	550	600

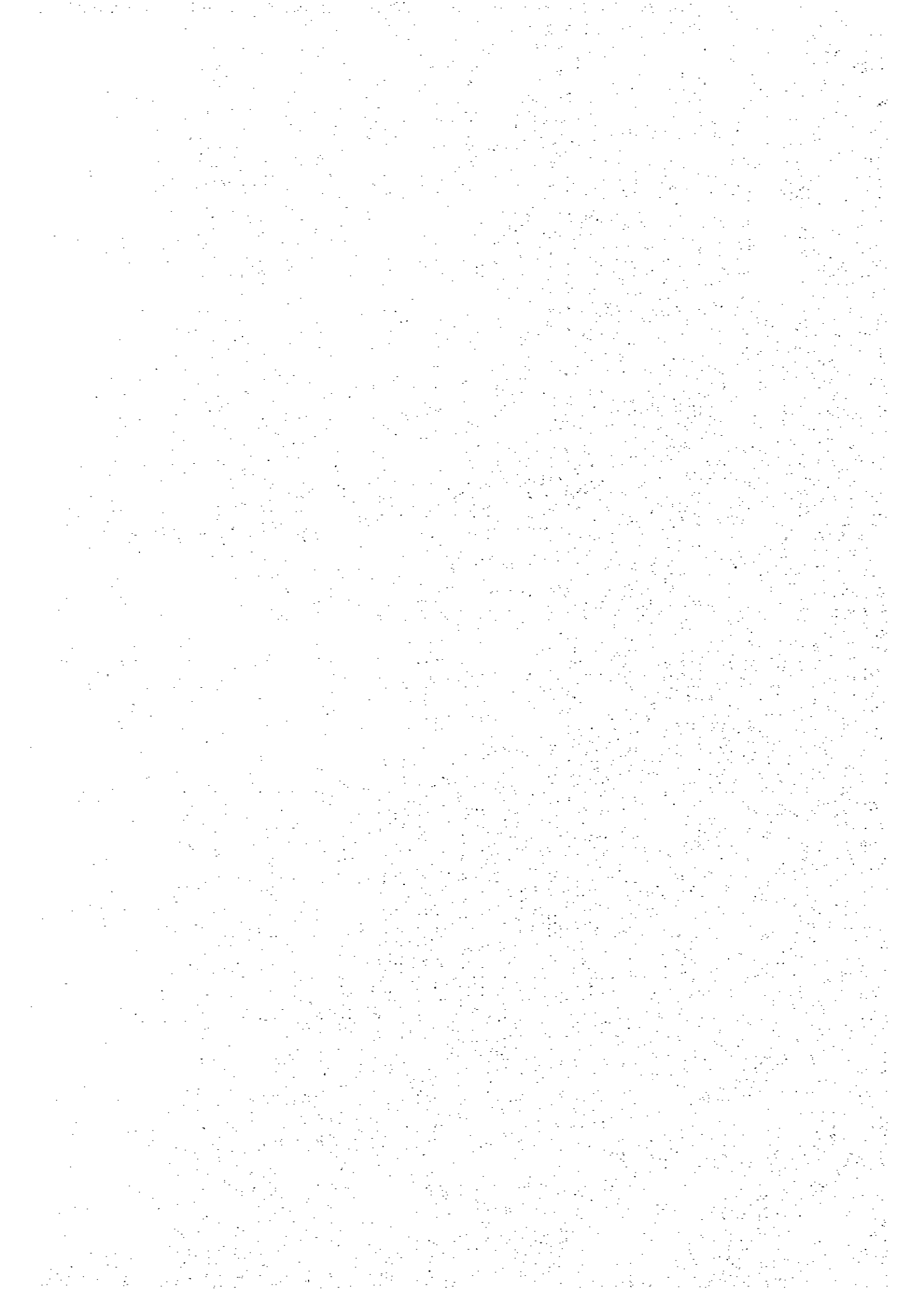
Considering above observations, in our opinion, following average allowable bearing capacities may be adopted in the foundation design ;

At 1.0 m below ground level 100 - 125 kN/m²
 At 2.0 m below ground level 175 - 200 kN/m²

Date : 17-01-11 Signature :


 Dr. Sunil de Silva
 B.Sc.(Eng) Hons.,M.Eng.,Ph.D

1-3 ボーリング柱状図



GEOLOGICAL RECORD OF BORING

HOLE No. BH - 01

PROJECT	PROPOSED 6TH PRIMARY SCHOOL		LOCATION	ANILNLE MAGU - MALE		
GROUND ELEVATION	DL+9.48 m	DEPTH OF HOLE	10.45m	ANGLE FROM VERTICAL	0	
DIAMETER OF HOLE	100 mm	MACHINE	YAM - 05	DATE OF DRILLING	13th & 14th August 1997	
CORE RECOVERY		DEPTH TO GROUND WATER LEVEL, IN HOLE	0.72 m below ground level			
		DRILLED BY	H.H. Weerasinghe		LOGGED BY	B.S. Yapa

ELEVATION (m)	DEPTH (m)	THICKNESS (m)	FIELD OBSERVATION				CORE RECOVERY %	DEPTH (m)	STANDARD PENETRATION TEST							
			COLUMN SECTION	SOIL OR ROCK CLASSIFICATION	COLOR	DESCRIPTION			NUMBER OF BLOWS N							
DL+8.48	0.00	0.42		SP/SW	Brown	DENSE POORLY TO WELL GRADED CORAL SANDS WITH SOME CORAL FRAGMENTS		1.0	18							
	0.50			SW/GW	White Brown	DENSE TO MEDIUM DENSE COARSE TO FINE CORAL SANDS WITH SOME CORAL FRAGMENTS		2.0	11							
DL+6.41	3.00	2.50		SW	White Brown	MEDIUM DENSE TO DENSE FINE TO COARSE WELL GRADED CORAL SANDS WITH CORAL FRAGMENTS		3.0	10							
DL+4.41	5.00	2.00		SW/GW	White Brown	DENSE POORLY GRADED CORAL SANDS		4.0	28							
DL+3.51	5.91	0.91		SP	White Brown	DENSE WELL GRADED CORAL SANDS		5.0	18							
DL+2.41	7.00	1.09		SW/GW	White Brown	VERY DENSE FINE TO COARSE POORLY GRADED CORAL SANDS		6.0	27							
								7.0	50/							
								8.0	31							
								9.0	34							
DL-0.97	10.45	3.45						10.0	38							
BORE HOLE TERMINATED AT 10.45 m BELOW GROUND LEVEL																

GEOLOGICAL RECORD OF BORING

HOLE No. BH - 02

PROJECT	PROPOSED 6TH PRIMARY SCHOOL	LOCATION	AMENUL HAGU - HALL
GROUND ELEVATION	DL+9.06 m	DEPTH OF HOLE	10.45 m
DIAMETER OF HOLE	100 mm	MACHINE	Y811 - 05
CORE RECOVERY		DATE OF DRILLING	15th & 16th August 1997
	DEPTH TO GROUND WATER LEVEL IN HOLE	0.59 m below ground level	
	DRILLED BY	D.R. Weerasinghe	
	LOGGED BY	B.S. Yapa	

ELEVATION (m)	DEPTH (m)	THICKNESS (m)	FIELD OBSERVATION			CORE		STANDARD PENETRATION TEST															
			COLUMN SECTION	SOIL OR ROCK CLASSIFICATION	COLOUR	DESCRIPTION	RECOVERY %	cm	DEPTH (m)	NUMBER OF BLOWS N													
DL+8.76	0.30	0.30		PL	Black + Grey	PARTIALLY DECEASED ORIGINALLY MOTTLED																	
DL+8.06	1.00	0.70		SP	Whites Brown	LOOSE TO MEDIUM FINE CORAL SANDS			1.0	06													
				SP/SW	Whites Brown	LOOSE TO MEDIUM FINE CORAL SANDS WITH SOME ROCK FRAGMENTS			2.0	09													
DL+6.06	3.00	2.00		SM/GW	Whites Brown	DENSE COARSE TO FINE POORLY TO WELL GRADED CORAL SAND WITH SOME CORAL FRAGMENTS			3.0	26													
									4.0	29													
									5.0	20													
									6.0	23													
DL+2.00	7.00	4.00		SP/SW	Whites Brown	DENSE COARSE TO FINE POORLY TO WELL GRADED SANDS WITH CORAL FRAGMENTS			7.0	17													
									8.0	21													
									9.0	18													
DL-0.94	10.00	3.00		SP	Whites Brown	DENSE POORLY GRADED CORAL SANDS			10.0	25													
DL-1.37	10.45	0.45																					
<p>BORE HOLE TERMINATED AT 10.45 m BELOW GROUND LEVEL</p>																							

GEOLOGICAL RECORD OF BORING

HOLE No. BH - 03

PROJECT	PROPOSED 5TH PRIMARY SCHOOL	LOCATION	ARLENCE HAGU - MALE
GROUND ELEVATION	DL + 9.05 m	DEPTH OF HOLE	10.45 m
DIAMETER OF HOLE	100 mm	MACHINE	YOM - 05
CORE RECOVERY		DATE OF DRILLING	16th & 17th August 1997
		DEPTH TO GROUND WATER LEVEL, IN MILE	0.51 m below ground level
		DRILLED BY	H.N. Weerasinghe
		LOGGED BY	B.S. Yapa

ELEVATION (m)	DEPTH (m)	THICKNESS (m)	FIELD OBSERVATION				CORE		STANDARD PENETRATION TEST							
			COLUMN SECTION	SOIL OR ROCK CLASSIFICATION	COLOUR	DESCRIPTION	RECOVERY %	DEPTH (m)	NUMBER OF BLOWS N							
									(N) 0	10	20	30	40	50	60	
DL + 6.05	3.00	3.00		SP/SW	Whitish Brown	VERY LOOSE TO LOOSE COARSE TO FINE		1.0	02							
DL + 5.14	3.91	0.91		SP	Whitish Brown	DENSE IN PLACE		3.0	21							
DL + 1.19	7.86	3.95		GW	Whitish Brown	DENSE COARSE TO FINE POORLY GRADED CORAL SANDS WITH POCKETS OF CORAL FRAGMENTS		4.0	19							
DL + 0.05	9.00	1.14		SW/GW	Whitish Brown	DENSE CORAL FRAGMENTS WITH SOME CORAL SAND		5.0	21							
DL + 0.95	10.00	1.00		SP	Whitish Brown	VERY DENSE FINE TO COARSE CORAL SANDS & CORAL FRAGMENTS		6.0	23							
DL - 1.40	10.45	0.45						7.0	21							
								8.0	17							
								9.0	32							
								10.0	32							
BORE HOLE TERMINATED AT 10.45 m BELOW GROUND LEVEL																

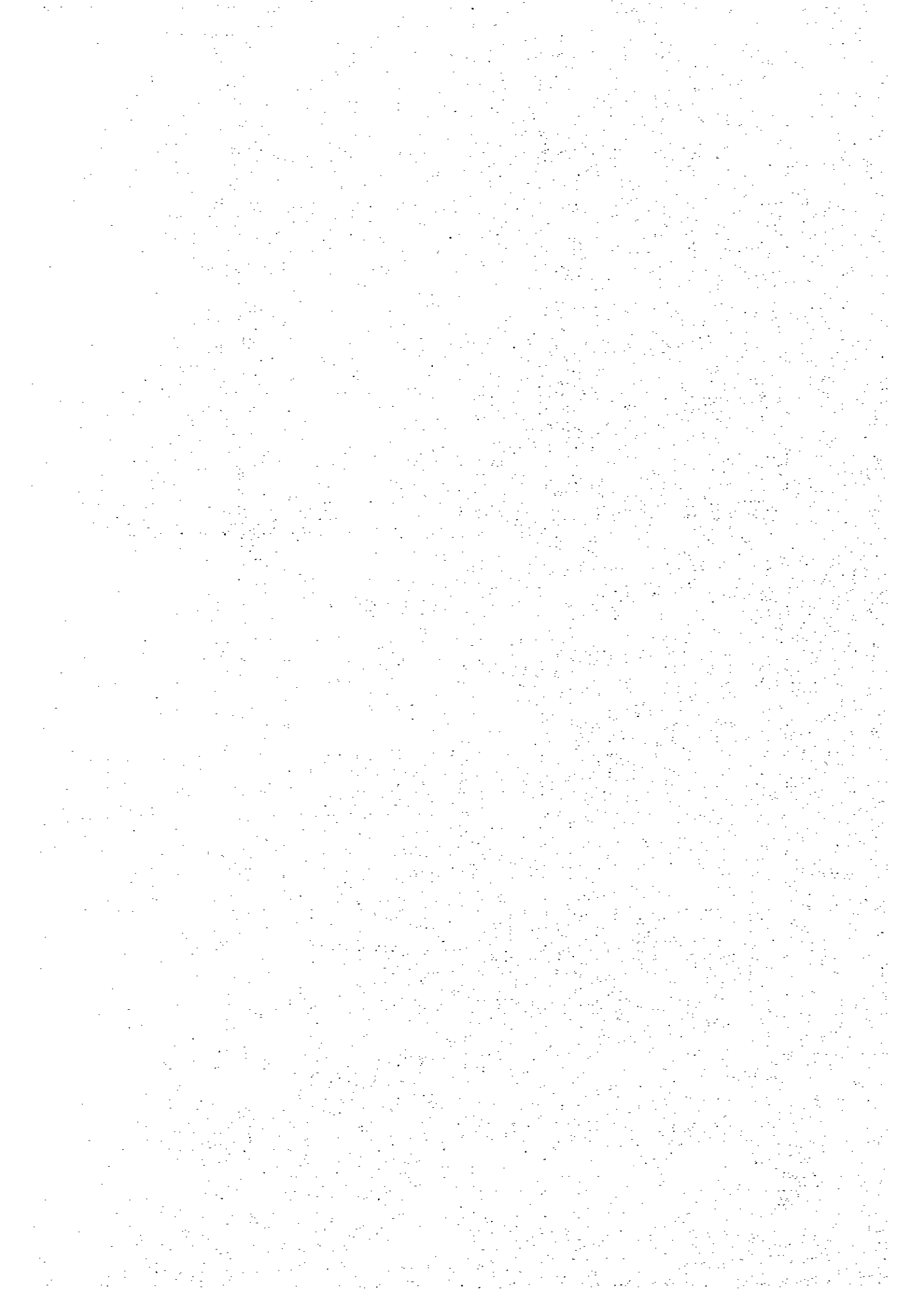
GEOLOGICAL RECORD OF BORING

HOLE No. BH - 04

PROJECT	PROPOSED 6TH PRIMARY SCHOOL		LOCATION	AMEENEE HADU - HALE		
GROUND ELEVATION	DL+9.51 m	DEPTH OF HOLE	10.45 m	ANGLE FROM VERTICAL	0	
DIAMETER OF HOLE		MACHINE	YBM - 05	DATE OF DRILLING	17th & 18th August 1997	
CORE RECOVERY		DEPTH TO GROUND WATER LEVEL IN HOLE	0.91 m below ground level			
DRILLED BY			K.M. Weerasinghe		LOGGED BY	8.S. Yapa

ELEVATION (m)	DEPTH (m)	THICKNESS (m)	FIELD OBSERVATION				CORE RECOVERY (%)	STANDARD PENETRATION TEST								
			COLUMN SECTION	SOIL OR ROCK CLASSIFICATION	COLOR	DESCRIPTION		DEPTH (m)	NUMBER OF BLOWS N							
								(N)	0	10	20	30	40	50	60	
DL+6.51	3.00	3.00		SW/GW	White Brown	DENSE COARSE TO FINE WELL GRADED CORAL SANDS WITH CORAL FRAGMENTS	100	1.0	24							
DL+4.02	5.49	2.49		SW	White Brown	MEDIUM DENSE TO DENSE COARSE TO FINE WELL GRADED CORAL SANDS WITH SOME CORAL FRAGMENTS	100	3.0	15							
DL-0.94	10.45	6.96		SP	White Brown	DENSE COARSE TO FINE POORLY GRADED CORAL SANDS	100	4.0	22							
								5.0	25							
								6.0	24							
								7.0	18							
								8.0	25							
								9.0	13							
								10.0	24							
BORE HOLE TERMINATED AT 10.45 m BELOW GROUND LEVEL																

1 - 4 標準貫入試驗結果



SOIL ENGINEERING AND DEEPWELLS (PVT) LTD

Client : Mohri Architect & Associates Inc.

Project : Proposed 6th Primary School

Location : Ameenee Magu - Male

Log of Bore Hole : BH 01

Date : 14th & 15th August 1997

Ground Water Level: 0.72 m below ground level

Logged by : B.S. Yapa

Depth (m)	SPT					Soil Group	Description of Material and Field Notes
	15 cm	10 cm	10 cm	10 cm	N		
0.00 0.08							Cement Mortar Pavement
0.08 0.50						SP/SW	Brown coarse to fine sands with some hard coral fragments upto 25 mm in sizes.
0.50 1.00							Whitish brown coarse to fine coral sands with coral fragments,
1.00 1.45	09	07	06	05	18	SW/GW	Whitish brown coarse to fine coral sands and lots of coral fragments, dense in place.
1.45 2.00						SW/GW	Whitish brown coarse to fine sands and coral fragments & Rods went down freely from 1.75 m - 1.85 m.
2.00 2.45	04	02	04	05	11	SW/GW	Whitish brown coarse to fine coral sands with coral fragments, medium dense in place.
2.45 3.00						SW/GW	Whitish brown coarse to fine coral sands with coral fragments, medium dense in place.
3.00 3.45	06	02	02	06	10	SW	Whitish brown coarse to fine coral sands with some coral fragments, medium dense in place.
4.00 4.45	33	09	11	08	28	SW/GW	Whitish brown coarse to fine coral sands with coral fragments, dense in place.
5.00 5.45	02	04	05	09	18	SP	Whitish brown coarse to fine coral sands, dense in place.
5.45 5.91						SP	Whitish brown fine to coarse coral sands
6.00 6.45	12	08	09	10	27	SW/GW	Whitish brown coarse to fine coral sands and gravels dense in place.

SOIL ENGINEERING AND DEEPWELLS (PVT) LTD

Client : Mohri Architect & Associates Inc.

Project : Proposed 6th Primary School

Location : Ameenee Magu - Male

Log of Bore Hole : BH 01

Date : 14th & 15th August 1997

Ground Water Level: 0.72 m below ground level

Logged by : B.S. Yapa

Depth (m)	S P T					Soil Group	Description of Material and Field Notes
	15 cm	10 cm	10 cm	10 cm	N		
7.00 7.23	35	50/ 8cm			50/ 8cm	SP	Whitish brown coarse to fine coral sands, extremely dense in place.
8.00 8.45	07	09	11	11	31	SP	Whitish brown coarse to fine coral sands, very dense in place.
9.00 9.45	10	11	11	12	34	SP	Whitish brown coarse to fine coral sands, very dense in place.
9.45 10.00						SP	Whitish brown coarse to fine coral sands very dense in place.
10.00 10.45	15	12	13	13	38	SP	Whitish brown coarse to fine coral sands very dense in place.
							<u>BORE HOLE TERMINATED AT 10.45 m BELOW GROUND LEVEL</u>

SOIL ENGINEERING AND DEEPWELLS (PVT) LTD

Client : Mohri Architect & Associates Inc.

Project : Proposed 6th Primary School

Location : Ameenee Magu - Male

Log of Bore Hole : BH 02

Date : 15th & 16th August 1997

Ground Water Level: 0.39 m below ground level

Logged by : B.S. Yapa

Depth (m)	S P T					Soil Group	Description of Material and Field Notes
	15 cm	10 cm	10 cm	10 cm	N		
0.00 0.30						Pt	Blackish brown partially decayed organic matter
0.30 1.00						SP	Whitish brown coarse to fine coral sands
1.00 0.45	02	02	02	02	06	SP/SW	Whitish brown coarse to fine coral sands, loose in place
2.00 2.45	04	02	03	04	09	SP/SW	Whitish brown coarse to fine coral sands with some coral fragments, medium dense in place.
3.00 3.45	06	08	09	09	26	SP/SW	Whitish brown coarse to fine coral sands and coral fragments, dense in place.
4.00 4.45	08	08	10	11	29	SP/SW	Whitish brown coarse to fine coral sands and coral fragments, dense in place.
5.00 5.45	08	06	11	11	28	SP/SW	Whitish brown fine to coarse coral sands and coral fragments, dense in place.
6.00 6.45	05	07	08	08	23	SP/SW	Whitish brown fine to coarse coral sands with coral fragments, dense in place.
7.00 7.45	10	06	06	05	17	SW/GW	Whitish brown in colour coarse to fine coral sands with lots of coral fragments, dense in place. At 7.51 m - There was hard coral fragments.

SOIL ENGINEERING AND DEEPWELLS (PVT) LTD

Client : Mohri Architect & Associates Inc.

Project : Proposed 6th Primary School

Location : Ameenee Magu - Male

Log of Bore Hole : BH 02

Date : 15th & 16th August 1997

Ground Water Level: 0.39 m below ground level

Logged by : B.S. Yapa

Depth (m)	S P T					Soil Group	Description of Material and Field Notes
	15 cm	10 cm	10 cm	10 cm	N		
8.00	08	05	07	09	21	SP/SW	Whitish brown in colour to fine coarse coral sands with some coral fragments, dense in place.
8.45							
9.00	08	05	06	07	18	SP/SW	Whitish brown in colour, coarse to fine coral sands with some coral fragments, dense in place.
9.45							
10.00	09	09	08	08	25	SP	Whitish brown in colour, coarse to fine coral sands, dense in place.
10.45							
<u>BORE HOLE TERMINATED AT 10.45 m BELOW GROUND LEVEL</u>							

SOIL ENGINEERING AND DEEPWELLS (PVT) LTD

Client : Mohri Architect & Associates Inc.

Project : Proposed 6th Primary School

Location : Ameeneo Magu - Male

Log of Bore Hole : BH 03

Date : 16th & 17th August 1997

Ground Water Level: 0.51 m below ground level

Logged by : B.S. Yapa

Depth (m)	S P T					Soil Group	Description of Material and Field Notes
	15 cm	10 cm	10 cm	10 cm	N		
0.00						SP/SW	Mainly whitish brown but mixed with blackish brown in colour, coarse to fine sands with some coral fragments, loose in place.
1.00							
1.00 1.45	01	01		01	02	SP/SW	Whitish brown, coarse to fine coral sands and some coral fragments, loose in place.
2.00 2.45	01	01	02	01	04	SP/SW	Greyish brown coarse to fine coral sands, very loose to loose in place.
3.00 3.45	08	08	05	18	21	SP/SW	Whitish brown coarse to fine coral sands with some coral fragments, dense in place
4.00 4.45	06	05	07	07	19	SP	Whitish brown coarse to fine coral sands dense in place.
5.00 5.45	07	06	07	08	21	SP	Whitish brown, coarse to fine coral sands with some coral fragments, dense in place.
6.00 6.45	08	07	08	08	23	SP	Whitish brown, coarse to fine coral sands with some coral fragments, dense in place.
7.00 7.45	12	08	08	05	21	SP	Whitish brown, coarse to fine coral sands with some coral fragments, dense in place.
8.00 8.45	08	05	06	06	17	GW	Whitish brown, lots of coral fragments with some coral sands, dense in place.

SOIL ENGINEERING AND DEEPWELLS (PVT) LTD

Client : **Mohri Architect & Associates Inc.**

Project : **Proposed 6th Primary School**

Location : **Ameenee Magu - Male**

Log of Bore Hole : **BH 03**

Date : **16th & 17th August 1997**

Ground Water Level: **0.51 m below ground level**

Logged by : **B.S. Yapa**

Depth (m)	S P T					Soil Group	Description of Material and Field Notes
	15 cm	10 cm	10 cm	10 cm	N		
9.00	05	09	11	12	32	SW/GW	Whitish brown coarse to fine sands and lots of coral fragments, very dense in place.
9.45							
10.00	08	10	11	11	32	SP	Whitish brown coarse to fine coral sands, very dense in place <u>BORE HOLE TERMINATED AT 10.45 m BELOW GROUND LEVEL</u>
10.45							

SOIL ENGINEERING AND DEEPWELLS (PVT) LTD

Client : Mohri Architect & Associates Inc.

Project : Proposed 6th Primary School

Location : Ameenee Magu - Male

Log of Bore Hole : BH 04

Date : 17th & 18th August 1997

Ground Water Level: 0.91 m below ground level

Logged by : B.S. Yapa

Depth (m)	S P T					Soil Group	Description of Material and Field Notes
	15 cm	10 cm	10 cm	10 cm	N		
0.00 1.00						SW/GW	Whitish brown coarse to fine coral sands and coral fragments.
1.00 1.45	12	08	07	09	24	SW/GW	Whitish brown coarse to fine coral sands with lots of coral fragments, dense in place
2.00 2.45	05	06	06	04	16	SW/GW	Whitish brown coarse to fine sands with lots of gravels and some coral fragments, dense in place.
3.00 3.45	03	03	04	06	13	SW	Whitish brown, coarse to fine coral sands with some coral fragments, medium dense in place.
4.00 4.45	19	06	08	08	22	SW	Whitish brown, coarse to fine coral sands with some coral fragments, medium dense in place.
5.00 5.45	07	07	09	09	25	SW	Whitish brown, coarse to fine coral sands, dense in place.
6.00 6.45	04	07	09	08	24	SP	Whitish brown, coarse to fine coral sands, dense in place.
7.00 7.45	04	05	05	08	18	SP	Whitish brown, coarse to fine coral sands, dense in place.
8.00 8.45	05	07	08	10	25	SP	Whitish brown, coarse to fine coral sands, dense in place.

SOIL ENGINEERING AND DEEPWELLS (PVT) LTD

Client : Mohri Architect & Associates Inc.

Project : Proposed 6th Primary School

Location : Ameenee Magu - Male

Log of Bore Hole : BH 04

Date : 17th & 18th August 1997

Ground Water Level: 0.91 m below ground level

Logged by : B.S. Yapa

Depth (m)	S P T					Soil Group	Description of Material and Field Notes
	15 cm	10 cm	10 cm	10 cm	N		
9.00 9.45	03	03	04	06	13	SP	Whitish brown coarse to fine coral sands, medium dense in place.
10.00 10.45	04	06	07	11	24	SP	Whitish brown coarse to fine coral sands, dense in place <u>BORE HOLE TERMINATED AT 10.45 m BELOW GROUND LEVEL</u>

第 2 章 室内土質試験結果

2-1 自然含水比試驗結果

1. NATURAL MOISTURE CONTENT

Bore Hole No.	Depth (m)	Moisture Content (%)
BH 01	1.00 - 1.45	15.8
	3.00 - 3.45	28.2
	10.00 - 10.45	29.2
BH 02	1.00 - 1.45	22.3
	3.00 - 3.45	15.2
	10.00 - 10.45	24.0
BH 03	1.00 - 1.45	30.4
	3.00 - 3.45	19.9
	10.00 - 10.45	25.9
BH 04	1.00 - 1.45	20.8
	3.00 - 3.45	17.9
	10.00 - 10.45	22.1

2-2 粒度分析試験結果

2. GRAIN SIZE DISTRIBUTION

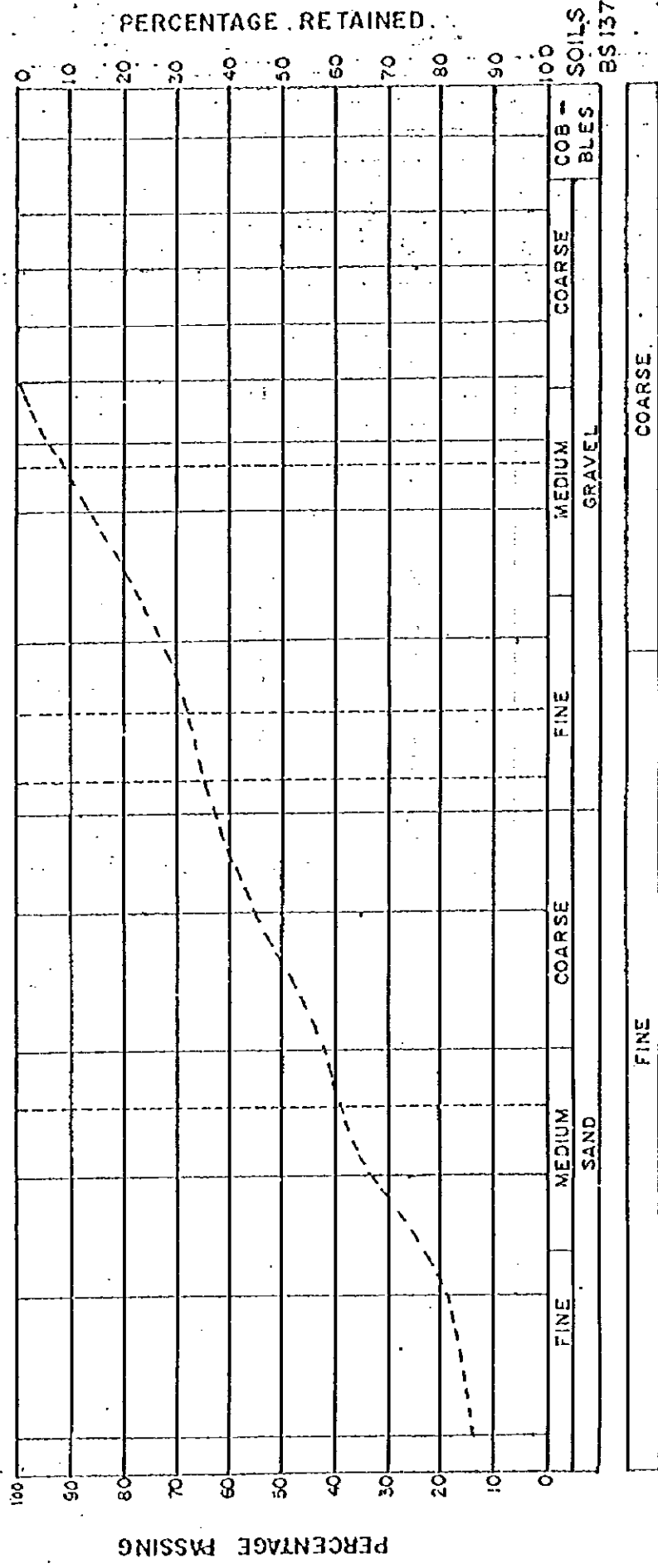
BH 01

Bore Hole No.	BH 01	BH 01	BH 01
Depth (m)	1.00 - 1.45	3.00 - 3.45	10.00 - 10.45
Sieve Size (mm)	Percentage Passing (%)		
19.0	100.0	79.0	-
9.5	86.1	66.3	100.0
4.75	71.9	56.9	99.9
2.36	66.5	49.9	99.2
1.18	56.4	41.1	92.0
0.600	41.6	30.0	76.4
0.300	34.7	16.3	48.8
0.150	19.3	7.6	11.8
0.075	14.8	3.4	1.4

PARTICLE SIZE DISTRIBUTION

SIEVE
ASTM
BS410

200	100	75	50	40	30	16	6	1/4"	1/2"	3/4"	1 1/2"	2"	3"	5"	75	100
0.075	0.15	0.212	0.3	0.425	0.6	1.18	2.36	3.35	5	6.7	10	12.5	14	20	28	37.5
0.063	0.075	0.085	0.1	0.15	0.25	0.425	0.6	0.85	1.18	1.6	2.5	3.75	5	7.5	10	15



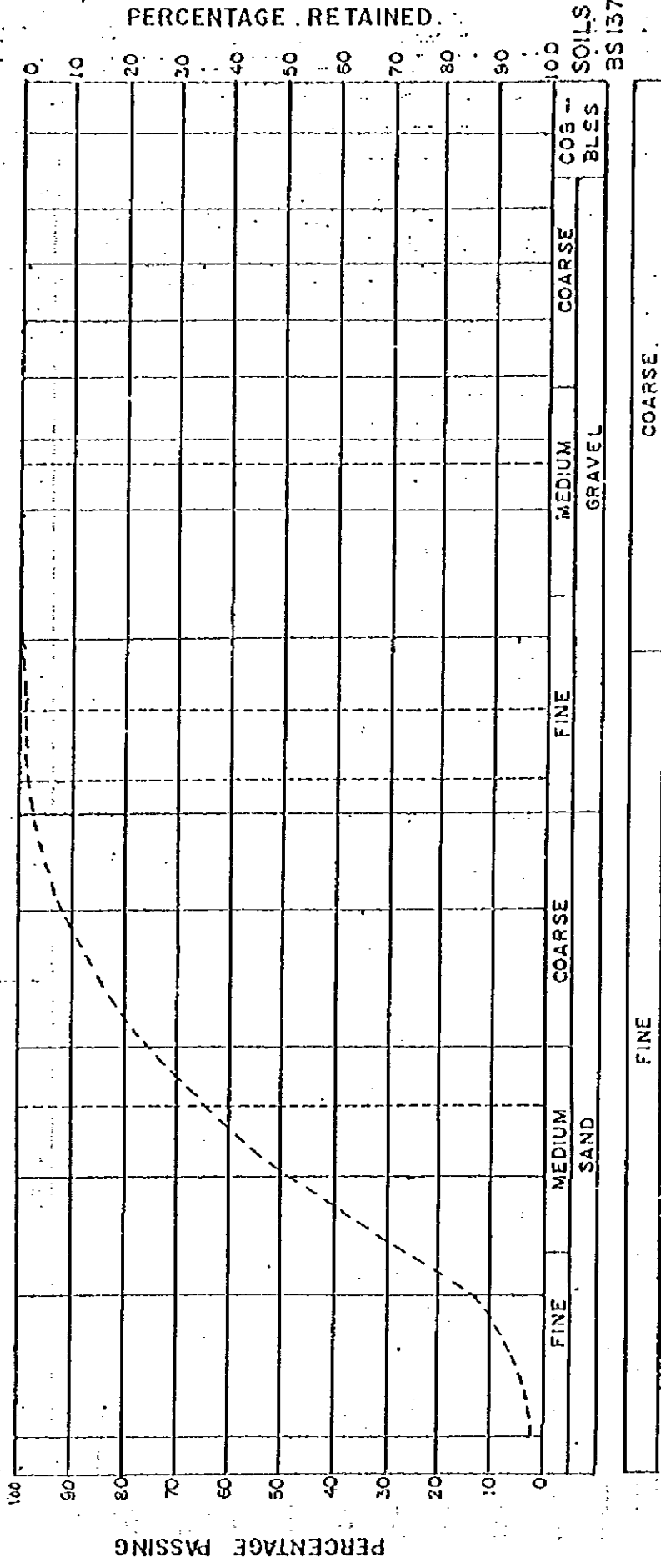
AGGREGATE
BS 882
Bore Hole No.: BH 01
Depth: 1.00 - 1.45

MATERIALS TESTING LABORATORY

PARTICLE SIZE DISTRIBUTION

SIEVE
ASTM
BS 410

200	100	75	50	40	30	16	6	1/4"	1/2"	3/4"	1 1/2"	2"	3"						
0.075	0.15	0.212	0.3	0.425	0.6	1.18	2.36	3.35	5	6.7	10	12.5	14	20	28	37.5	50	75	100
0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075



AGGREGATE
BS 882

Bore Hole No. :
BH 01

Depth
10.00 - 10.45

MATERIALS TESTING LABORATORY

BH 01

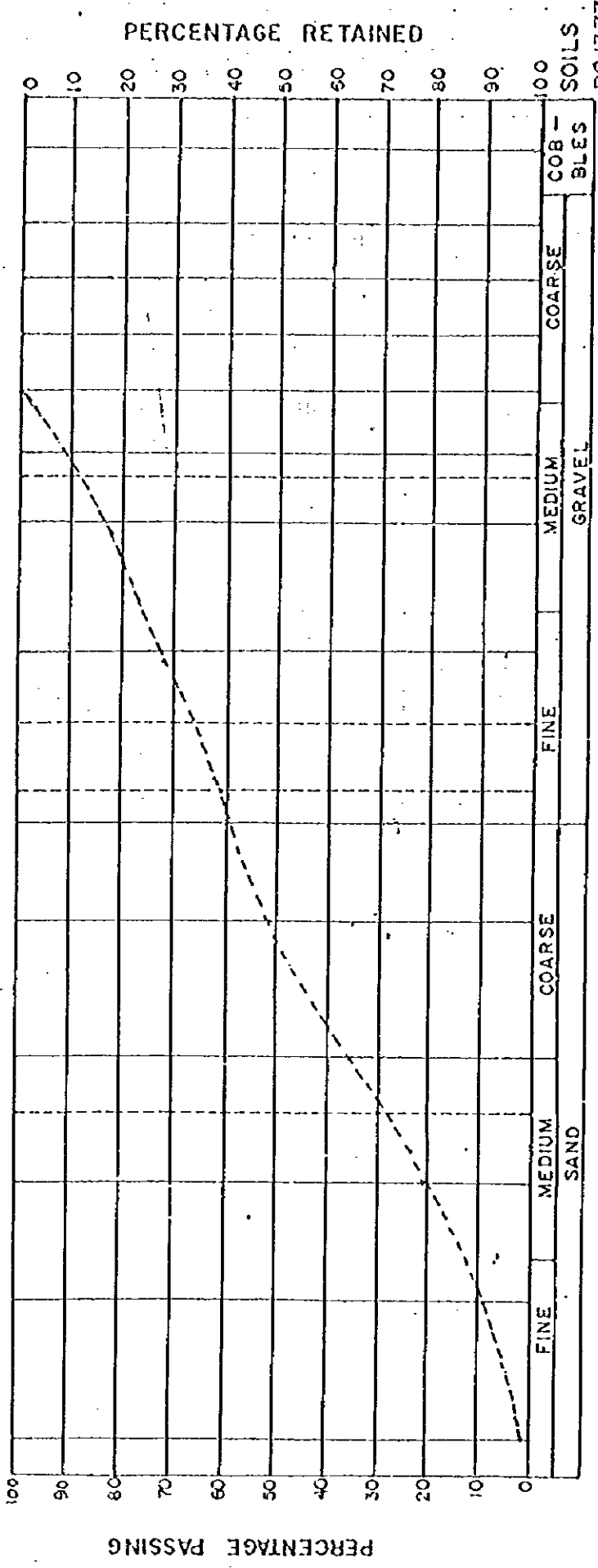
Bore Hole No.	BH 01	BH 01	BH 01	BH 01
Depth (m)	1.45 - 2.00	5.00 - 5.45	6.00 - 6.45	6.45 - 7.00
Sieve Size (mm)	Percentage Passing (%)			
19.0	100	-	-	-
9.5	82.4	100.0	100.0	100.00
4.75	71.6	99.6	98.2	99.6
2.36	61.2	96.7	96.7	98.0
1.18	50.9	84.1	87.4	90.7
0.600	36.5	62.7	68.6	74.9
0.300	20.9	33.6	38.7	42.8
0.150	9.0	7.6	10.2	14.8
0.075	2.0	0.8	1.7	2.0

PARTICLE SIZE DISTRIBUTION

SIEVE

200	100	75	50	40	30	16	6	1/4"	1/2"	3/4"	1 1/2"	2"	3"	ASTM					
0.075	0.15	0.212	0.3	0.425	0.6	1.18	2.36	3.35	5	6.7	10	12.5	14	20	28	37.5	50	75	100
0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075
0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075

BS 410



BS 1377

AGGREGATE

BS 882

BH 01

Bore Hole No. :

Depth : 1.45 - 2.00

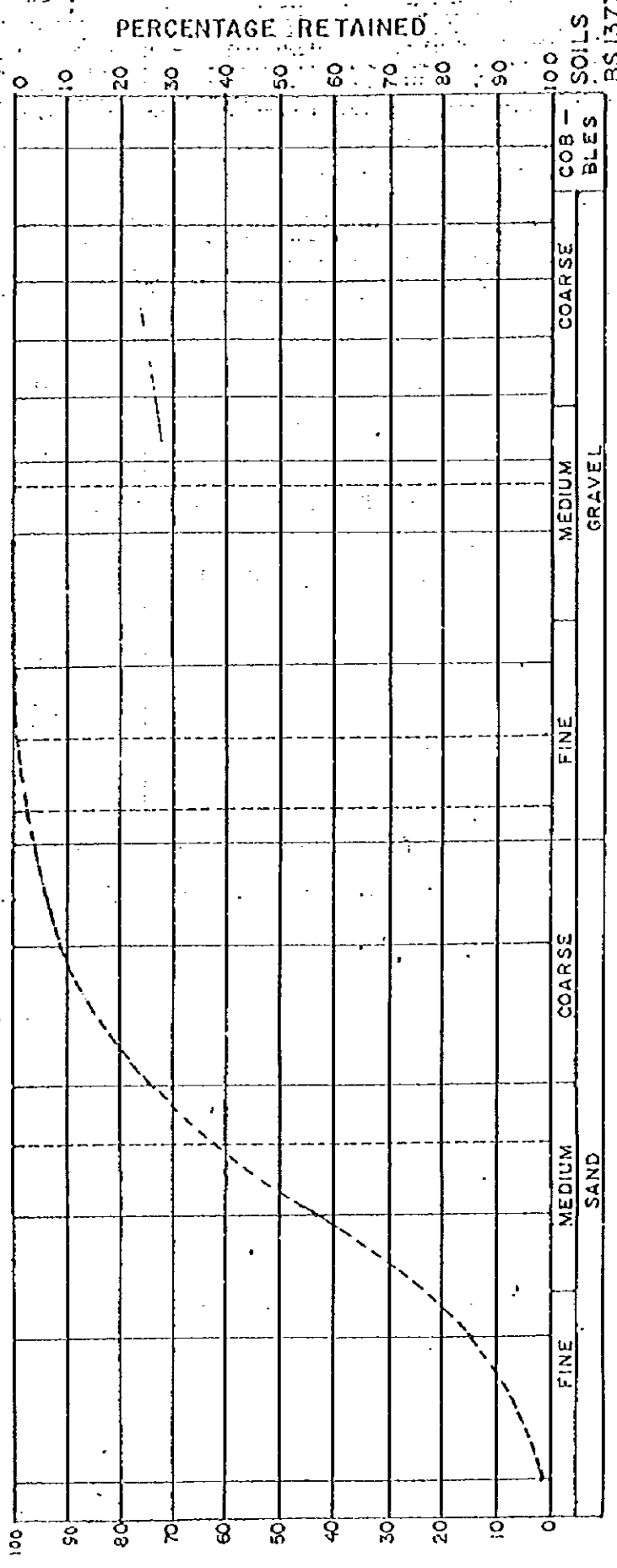
MATERIALS TESTING LABORATORY

PARTICLE SIZE DISTRIBUTION

SIEVE

ASTM
BS410

200	100	75	50	40	30	16	6	1/4"	1/2"	3/4"	1 1/2"	2"	3"															
0.075	0.15	0.212	0.3	0.425	0.6	1.18	2.36	3.35	5	6.7	10	12.5	14	20	28	37.5	50	75	100									
0.075	0.080	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	2	3	4	5	6	7	8	9	10	20	30	40	50	60	70	80	90	100



PERCENTAGE PASSING

PERCENTAGE RETAINED

FINE	MEDIUM SAND	COARSE SAND	FINE GRAVEL	MEDIUM GRAVEL	COARSE GRAVEL	COB - BLES
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FINE	COARSE
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AGGREGATE
BS 882

Bore Hole No.: BH 01

Depth: 6.45 - 7.00

MATERIALS TESTING LABORATORY

BH 02

Bore Hole No.	BH 02	BH 02	BH 02
Depth (m)	1.00 - 1.45	3.00 - 3.45	10.00 - 10.45
Sieve Size (mm)	Percentage Passing (%)		
19.0	100.0	100.00	-
9.5	93.0	83.3	-
4.75	88.8	75.9	-
2.36	81.2	69.7	100.0
1.18	65.2	58.9	92.0
0.600	44.6	44.9	67.6
0.300	22.7	27.2	30.4
0.150	9.0	10.7	6.0
0.075	4.2	4.6	0.6

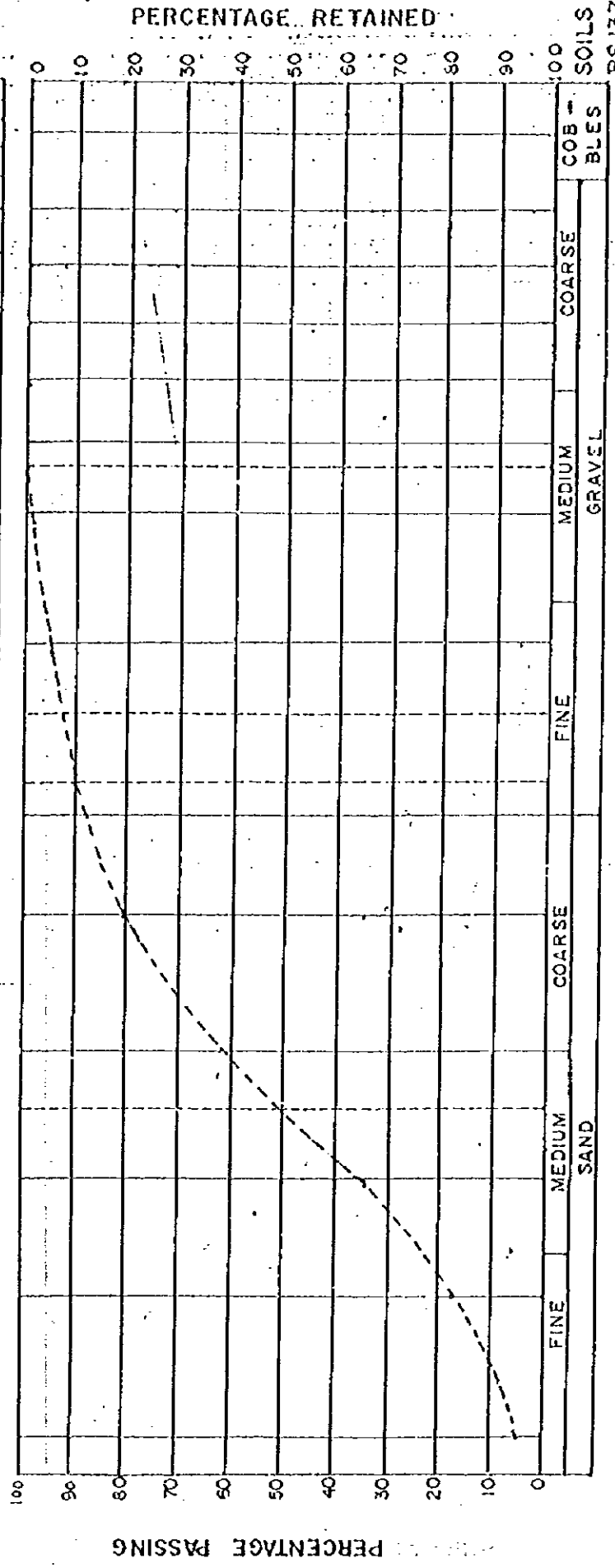
BH 02

Bore Hole No.	BH 02	BH 02	BH 02	BH 02	BH 02
Depth (m)	1.45 - 2.00	2.00 - 2.45	4.00 - 4.75	5.00 - 5.45	8.00 - 8.45
Sieve Size (mm)	Percentage Passing (%)				
19.0	100.0	100.00	100.0	100.0	100.0
9.5	97.7	92.5	93.2	92.3	77.4
4.75	94.7	88.3	89.1	87.0	68.4
2.36	90.1	83.8	86.9	79.3	64.7
1.18	79.8	75.8	77.3	75.7	61.2
0.600	61.6	62.6	61.2	70.0	56.8
0.300	35.7	42.5	39.2	59.8	50.3
0.150	18.4	16.4	17.9	40.2	33.4
0.075	5.1	3.5	3.1	10.0	6.1

PARTICLE SIZE DISTRIBUTION

SIEVE
ASTM
BS410

200	100	75	50	40	30	16	6	1/4"	1/2"	3/4"	1 1/2"	2"	3"						
0.075	0.15	0.212	0.3	0.425	0.6	1.18	2.36	3.35	5	6.7	10	12.5	14	20	28	37.5	50	75	100
0.075	0.075	0.080	0.1	0.15	0.25	0.425	0.75	1.18	1.75	2.5	3.75	5.0	7.5	10.0	15.0	22.5	35.0	50.0	75.0



FINE	MEDIUM SAND	COARSE SAND
FINE	MEDIUM GRAVEL	COARSE GRAVEL
FINE SOILS		
COARSE SOILS		

AGGREGATE
BS 882

Bore Hole No.: BH 02

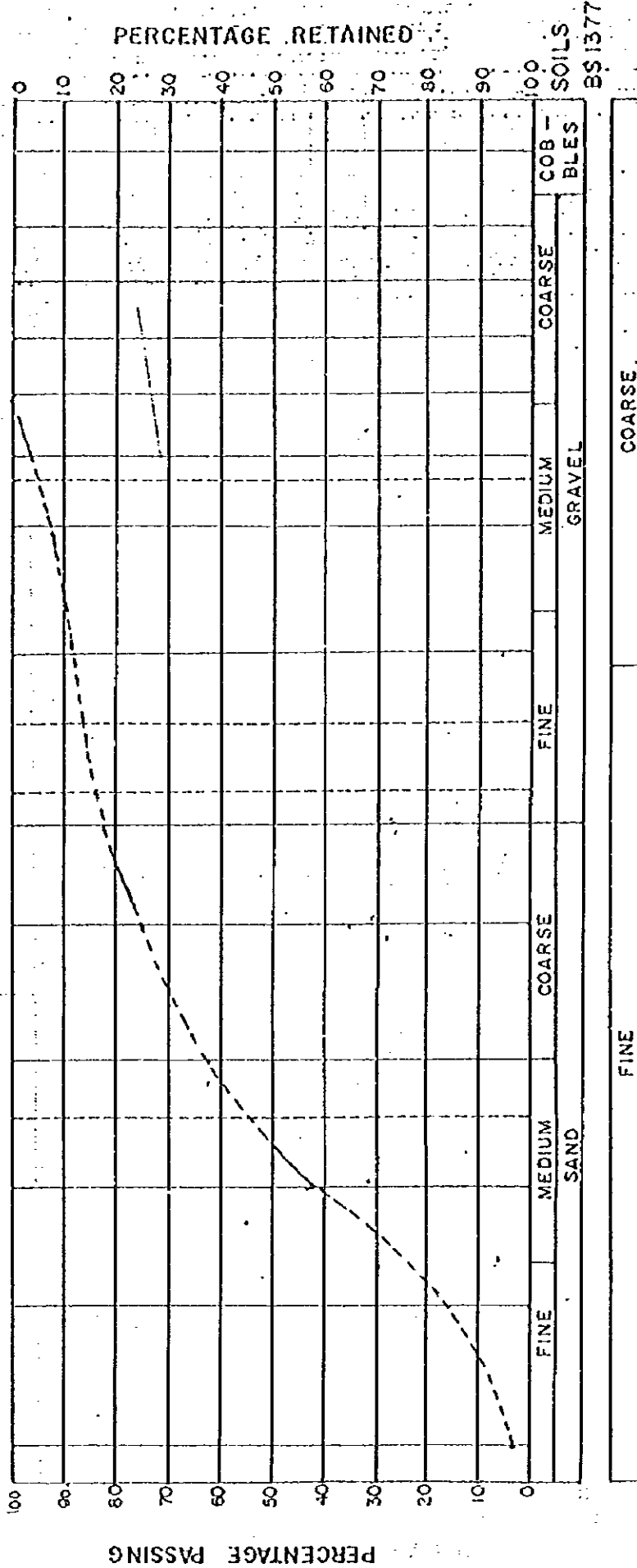
Depth: 1.45 - 2.00

MATERIALS TESTING LABORATORY

PARTICLE SIZE DISTRIBUTION

SIEVE
ASTM
BS410

200	100	75	50	40	30	16	6	1/4"	1/2"	3/4"	1 1/2"	2"	3"
0.075	0.15	0.212	0.3	0.425	0.6	1.18	2.36	3.35	5	6.7	10	12.5	14
0.063	0.075	0.080	0.1	0.15	0.25	0.425	0.6	0.75	0.85	1.0	1.18	1.4	1.75
0.075	0.15	0.212	0.3	0.425	0.6	1.18	2.36	3.35	5	6.7	10	12.5	14
0.075	0.15	0.212	0.3	0.425	0.6	1.18	2.36	3.35	5	6.7	10	12.5	14



AGGREGATE
BS 882

Bore Hole No. : BH 02

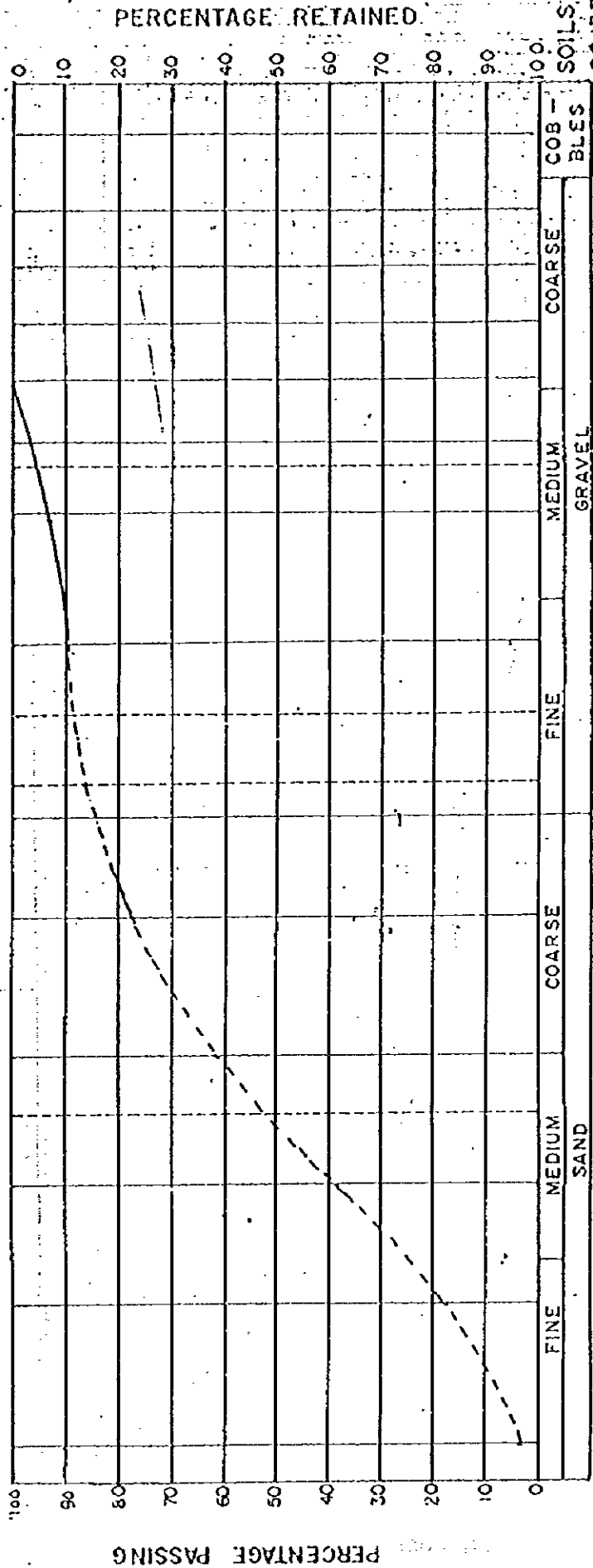
Depth : 2.00 - 2.45

MATERIALS TESTING LABORATORY

PARTICLE SIZE DISTRIBUTION

SIEVE
ASTM
BS 410

200	100	75	50	40	30	16	6	1/4"	1/2"	3/4"	1 1/2"	2"	3"						
0.075	0.15	0.212	0.3	0.425	0.6	1.18	2.36	3.35	5	6.7	10	12.5	14	20	28	37.5	50	75	100
0.075	0.075	0.080	0.1	0.15	0.25	0.425	0.75	1.18	2.0	3.0	4.75	7.5	11.8	19	29.5	47.5	75	118	190



AGGREGATE
BS 832

Bore Hole No. : BH 02

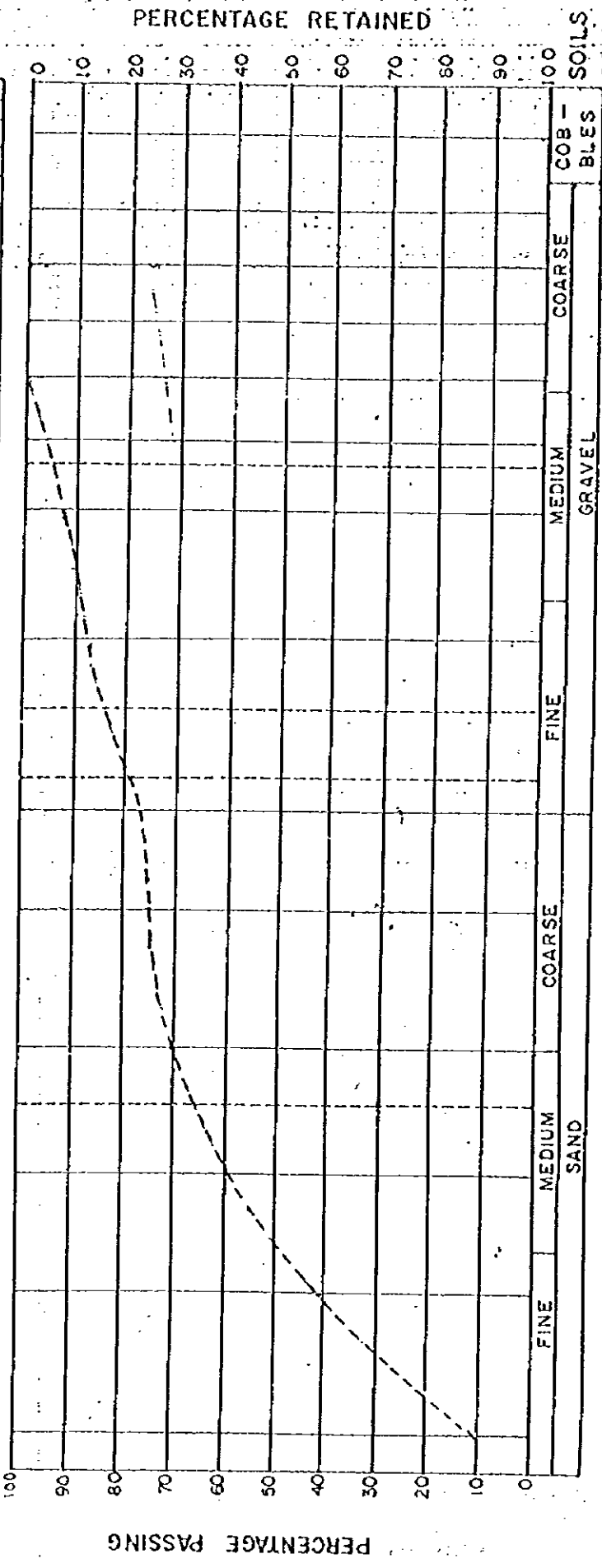
Depth : 4.00 - 4.75

MATERIALS TESTING LABORATORY

PARTICLE SIZE DISTRIBUTION

SIEVE
ASTM
BS410

200	100	75	50	40	30	16	6	1/4"	1/2"	3/4"	1 1/2"	2"	3"															
0.075	0.15	0.212	0.3	0.425	0.6	1.18	2.36	3.35	5	6.7	10	12.5	14	20	28	37.5	50	75	100									
0.075	0.0804	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	2	3	4	5	6	7	8	9	10	20	30	40	50	60	70	80	90	100



SOILS
BS1377

AGGREGATE
BS 882

Bore Hole No. : BH 02

Depth : 5.00 - 5.45

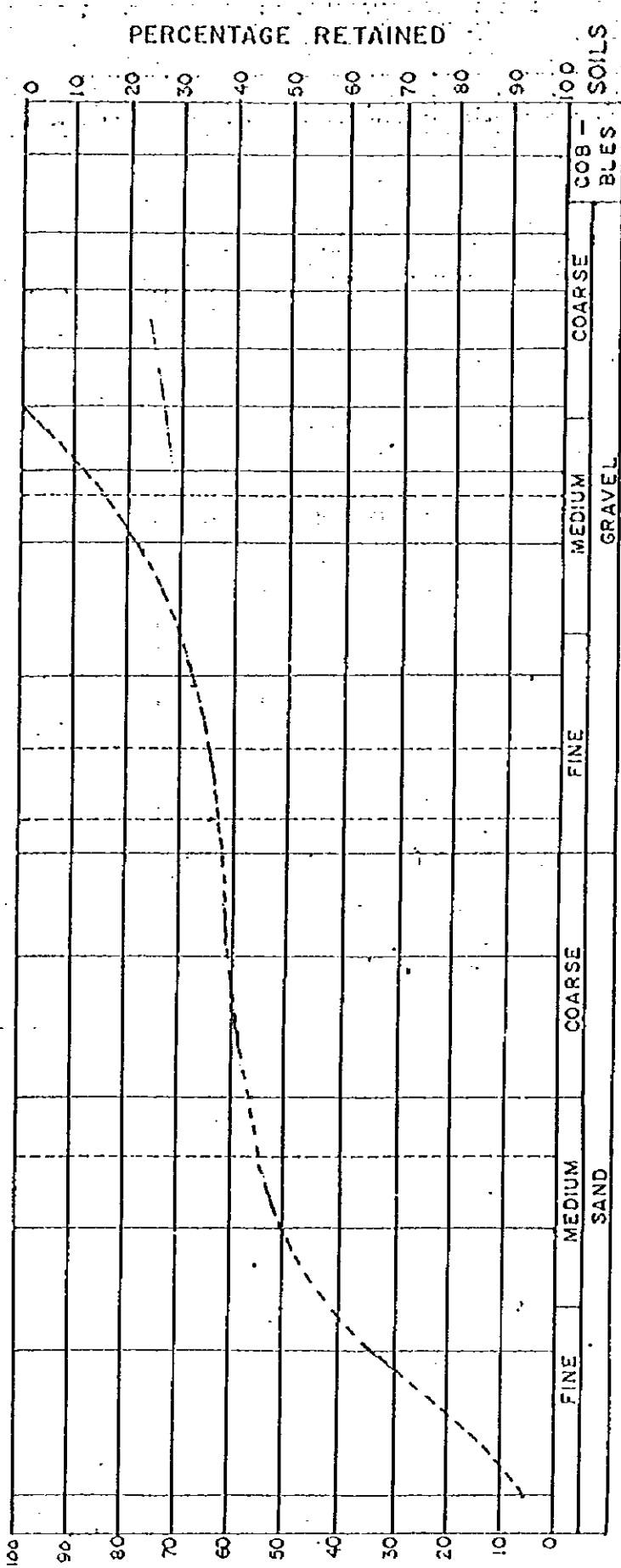
MATERIALS TESTING LABORATORY

PARTICLE SIZE DISTRIBUTION

SIEVE

ASTM
BS410

200	100	75	50	40	30	16	6	1/4"	1/2"	3/4"	1 1/2"	2"	3"						
0.075	0.15	0.212	0.3	0.425	0.6	1.18	2.36	3.35	5	6.7	10	12.5	14	20	28	37.5	50	75	100
0.075	0.08	0.1	0.15	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1	1.18	1.4	1.75	2.0	2.5	3.0	3.75



FINE			MEDIUM SAND			COARSE SAND			FINE GRAVEL			MEDIUM GRAVEL			COARSE GRAVEL			COB BLES		
SOILS																				
BS 1377																				

AGGREGATE

BS 882

BH 02

Bore Hole No. :

Depth : S.00 - 8.45

MATERIALS TESTING LABORATORY

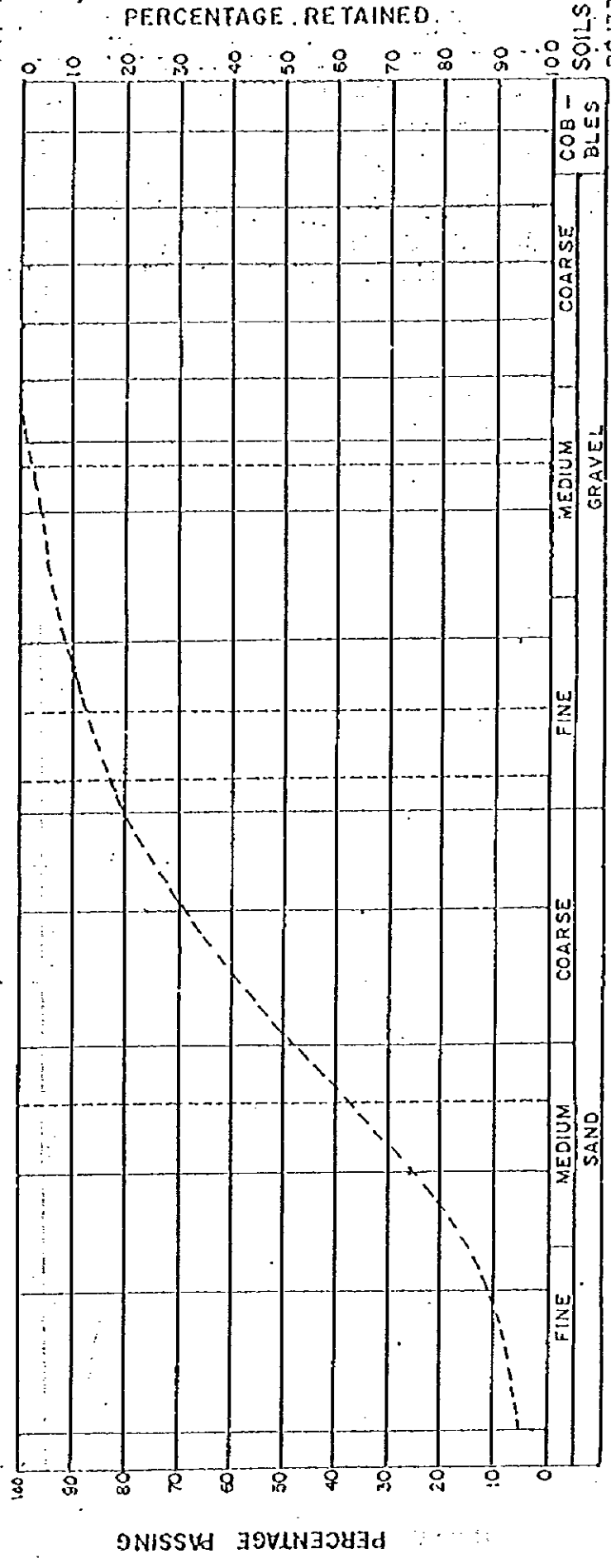
BH 03

Bore Hole No.	BH 03	BH 03	BH 03
Depth (m)	1.00 - 1.45	3.00 - 3.45	10.00 - 10.45
Sieve Size (mm)	Percentage Passing (%)		
19.0	100	100.0	-
9.5	96.2	91.9	-
4.75	91.0	87.3	-
2.36	83.2	82.4	100.0
1.18	68.9	68.3	91.0
0.600	48.5	47.9	67.6
0.300	25.6	25.5	30.9
0.150	10.6	6.8	5.2
0.075	5.1	2.0	0.8

PARTICLE SIZE DISTRIBUTION

SIEVE
ASTM
BS410

200	100	75	50	40	30	16	6	1/4"	1/2"	3/4"	1 1/2"	2"	3"						
0.075	0.15	0.212	0.3	0.425	0.6	1.18	2.36	3.35	5	6.7	10	12.5	14	20	28	37.5	50	75	100
0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075



FINE COARSE

AGGREGATE
BS 882

Bore Hole No.: BH 03

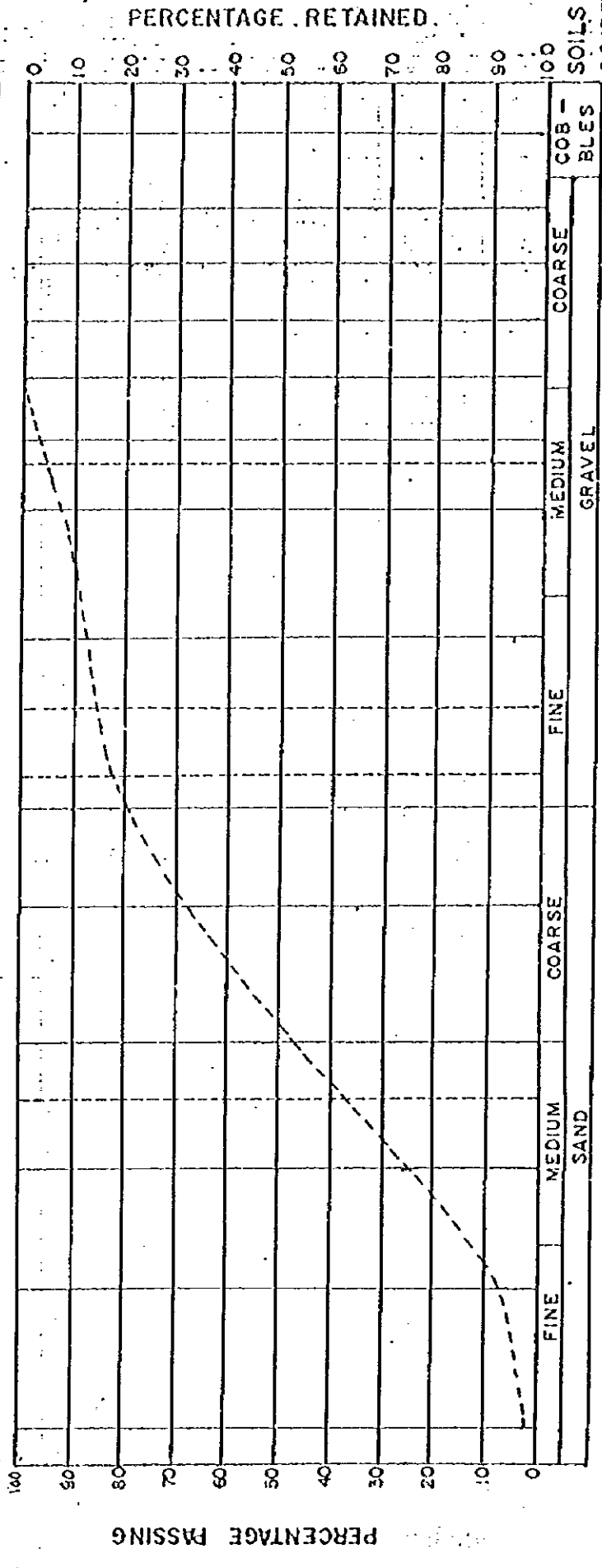
Depth: 1.00 - 1.45

MATERIALS TESTING LABORATORY

PARTICLE SIZE DISTRIBUTION

SIEVE
ASTM
BS410

200	100	75	50	40	30	16	10	6	4	3	2	1.18	0.85	0.6	0.425	0.3	0.25	0.2	0.15	0.106	0.075	0.05	0.0375	0.025	0.015	0.0075																							
0.075	0.15	0.212	0.3	0.425	0.6	1.18	2.36	3.35	5	6.7	10	12.5	14	20	28	37.5	50	75	100	150	250	425	750	1060	1500	2500	4250																						
0.075	0.0801	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.18	1.6	2.0	2.5	3.15	4.0	5.0	6.3	8.0	10	12.5	16	20	25	31.5	40	50	63	80	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000	6300	8000	10000



FINE

COARSE

AGGREGATE
BS 882

Bore Hole No. : BH 03

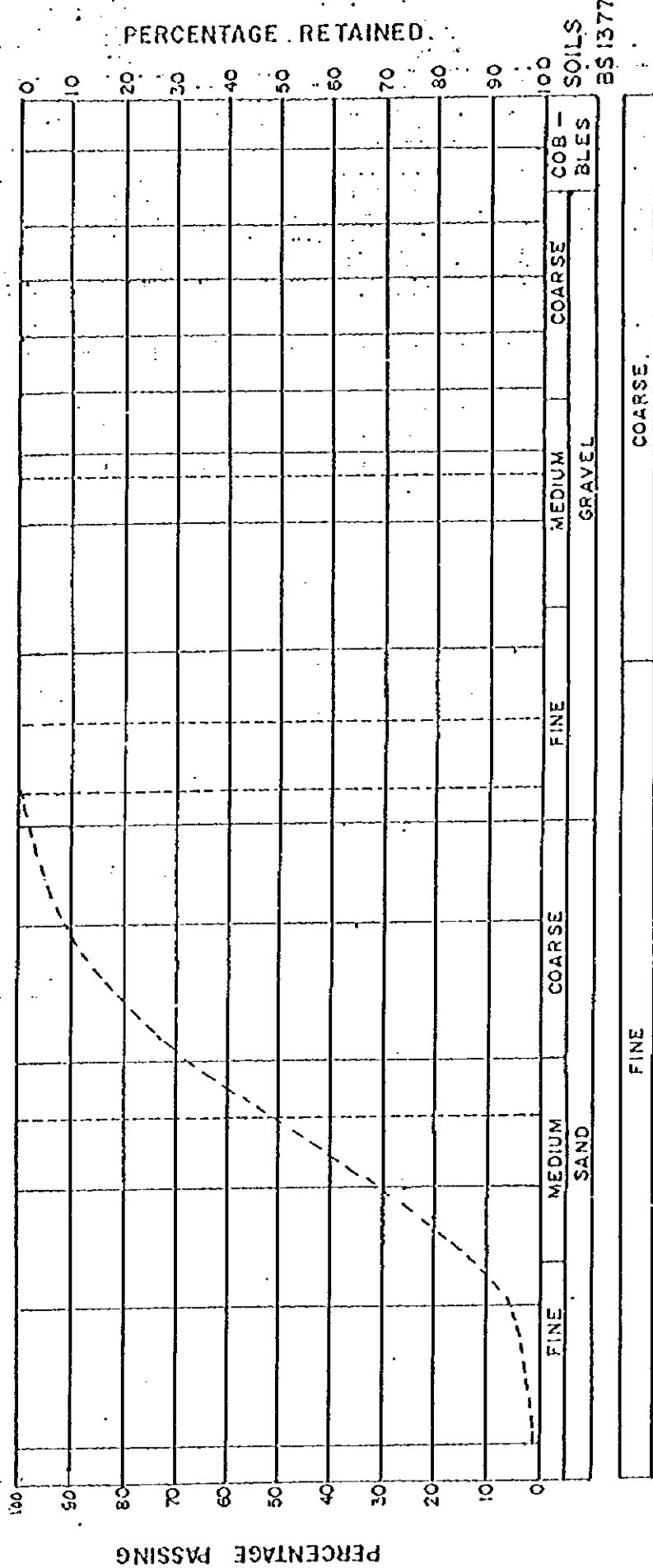
Depth : 3.00 - 3.45

MATERIALS TESTING LABORATORY

PARTICLE SIZE DISTRIBUTION

SIEVE
ASTM
BS410

200	100	75	50	40	30	16	6	1/4"	1/2"	3/4"	1 1/2"	2"	3"
0.075	0.15	0.212	0.3	0.425	0.6	1.18	2.36	3.35	5	6.7	10	12.5	14
0.075	0.080	0.1	0.125	0.15	0.18	0.225	0.28	0.35	0.44	0.54	0.67	0.84	1.05



AGGREGATE
BS 882

Bore Hole No. : BH 03

Depth : 10.00 - 10.45

SOILS
BS 1377

MATERIALS TESTING LABORATORY

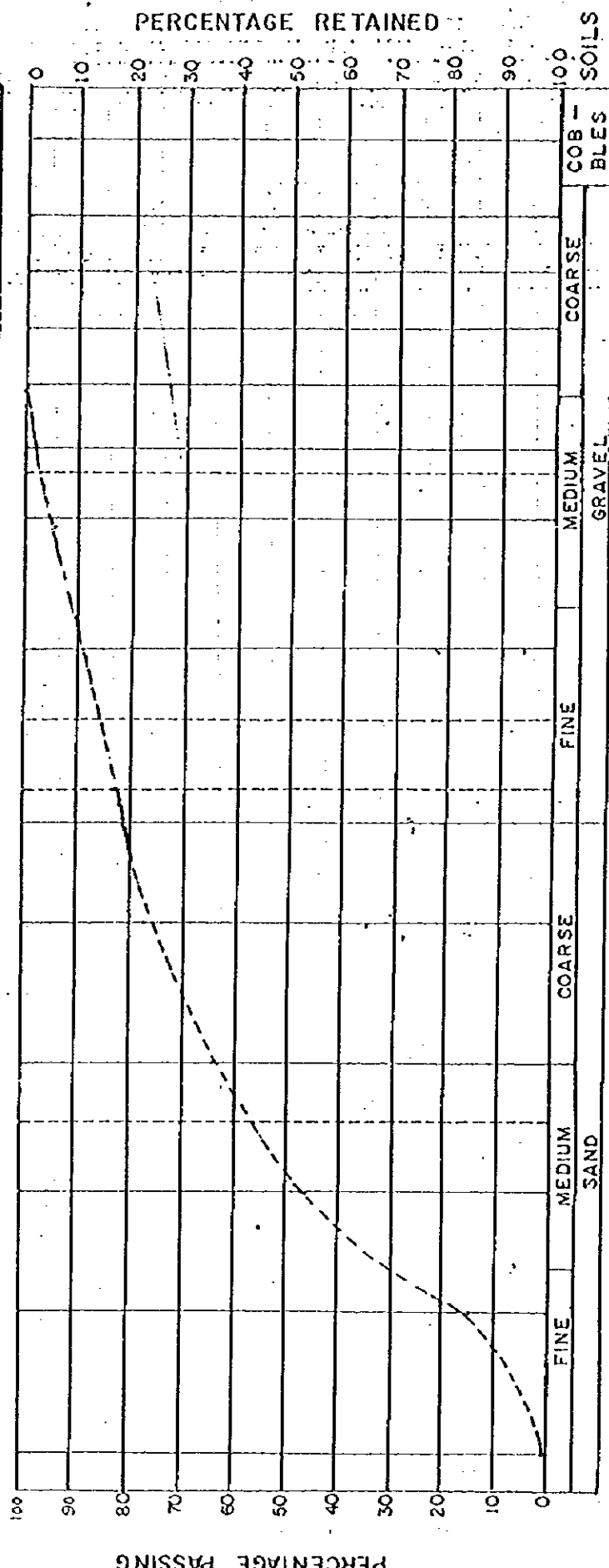
BH 03

Bore Hole No.	BH 03	BH 03	BH 03	BH 03
Depth (m)	4.00 - 4.75	5.00 - 5.45	6.00 - 6.45	7.00 - 7.45
Sieve Size (mm)	Percentage Passing (%)			
19.0	100	100.0	100.0	100.0
9.5	95.8	94.2	93.6	68.3
4.75	93.5	88.7	84.8	55.2
2.36	91.5	83.2	80.0	50.1
1.18	80.3	78.1	75.5	47.2
0.600	59.9	64.4	70.7	44.3
0.300	36.0	46.7	61.3	39.3
0.150	9.1	15.6	22.8	16.6
0.075	0.7	0.8	0.8	1.8

PARTICLE SIZE DISTRIBUTION

SIEVE
ASTM
BS410

200	100	75	50	40	30	16	6	1/4"	1/2"	3/4"	1 1/2"	2"	3"
0.075	0.15	0.212	0.3	0.425	0.6	1.18	2.36	3.35	5	6.7	10	12.5	14
0.075	0.080	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	2	3	4



AGGREGATE
BS 1377

AGGREGATE
BS 882

Bore Hole No.: BH 03

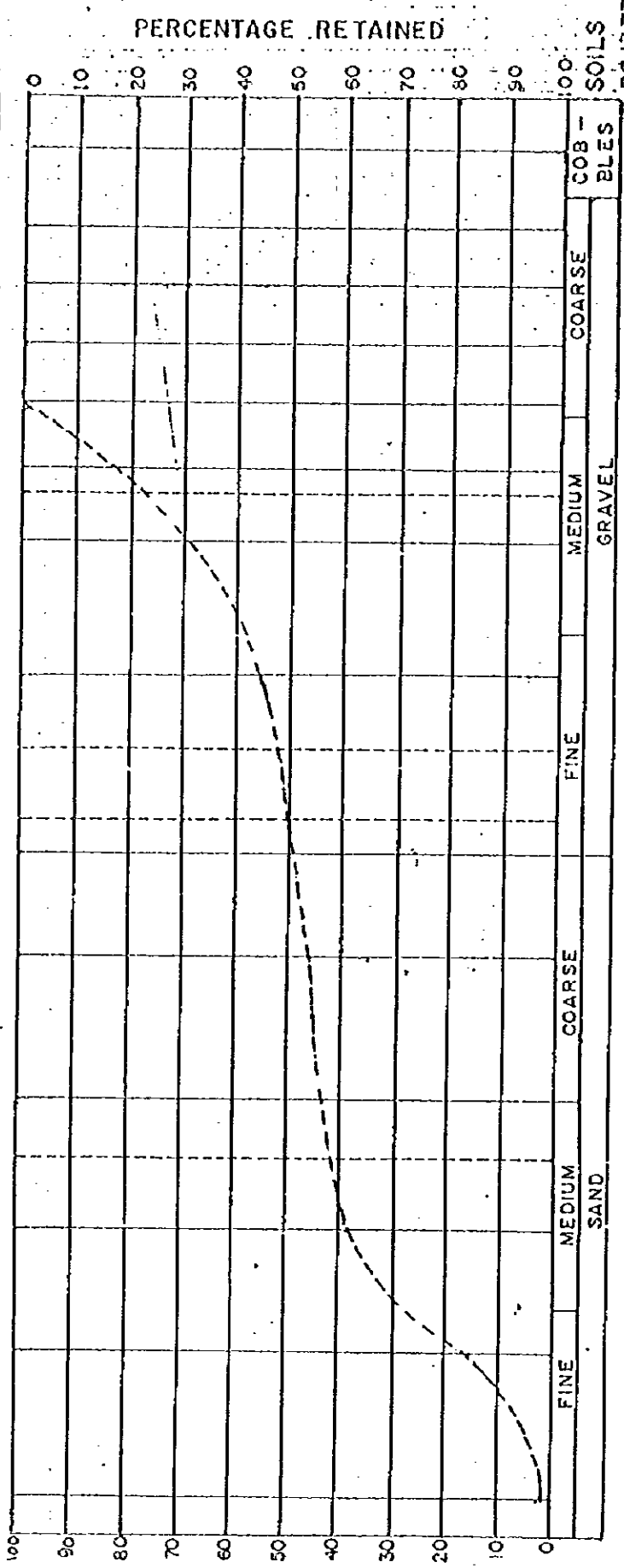
Depth: 5.00 - 5.45

MATERIALS TESTING LABORATORY

PARTICLE SIZE DISTRIBUTION

SIEVE
ASTM
BS410

200	100	75	50	40	30	16	6	1/4"	1/2"	3/4"	1 1/2"	2"	3"						
0.075	0.15	0.212	0.3	0.425	0.6	1.18	2.36	3.35	5	6.7	10	12.5	14	20	28	37.5	50	75	100
0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075



AGGREGATE
BS 882

Bore Hole No. : BH 03
Depth : 7.00 - 7.45

MATERIALS TESTING LABORATORY

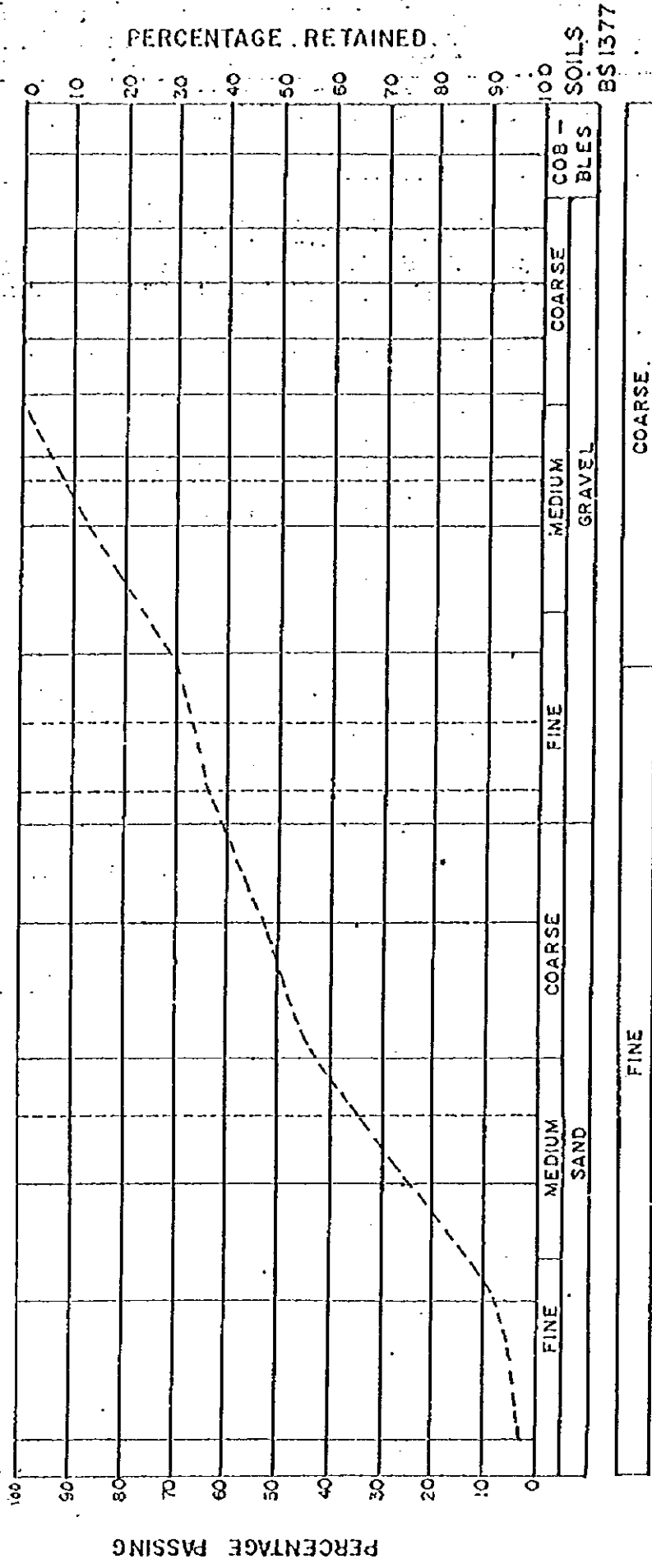
BH 04

Bore Hole No.	BH 04	BH 04	BH 04
Depth (m)	1.00 - 1.45	3.00 - 3.45	10.00 - 10.45
Sieve Size (mm)	Percentage Passing (%)		
19.0	100.0	100.00	100.0
9.5	86.8	95.3	99.8
4.75	69.9	89.3	98.1
2.36	64.4	83.6	94.5
1.18	52.4	69.3	83.1
0.600	42.9	44.7	60.8
0.300	24.7	20.8	33.6
0.150	7.9	7.9	11.1
0.075	3.7	3.8	3.6

PARTICLE SIZE DISTRIBUTION

SIEVE
ASTM
BS 410

200	100	75	50	40	30	16	6	1/4"	1/2"	3/4"	1 1/2"	2"	3"
0.075	0.15	0.212	0.3	0.425	0.6	1.18	2.36	3.35	5	6.7	10	12.5	14
0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075



AGGREGATE
BS 882

Bore Hole No. : BH 04

Depth : 1.00 - 1.45

MATERIALS TESTING LABORATORY

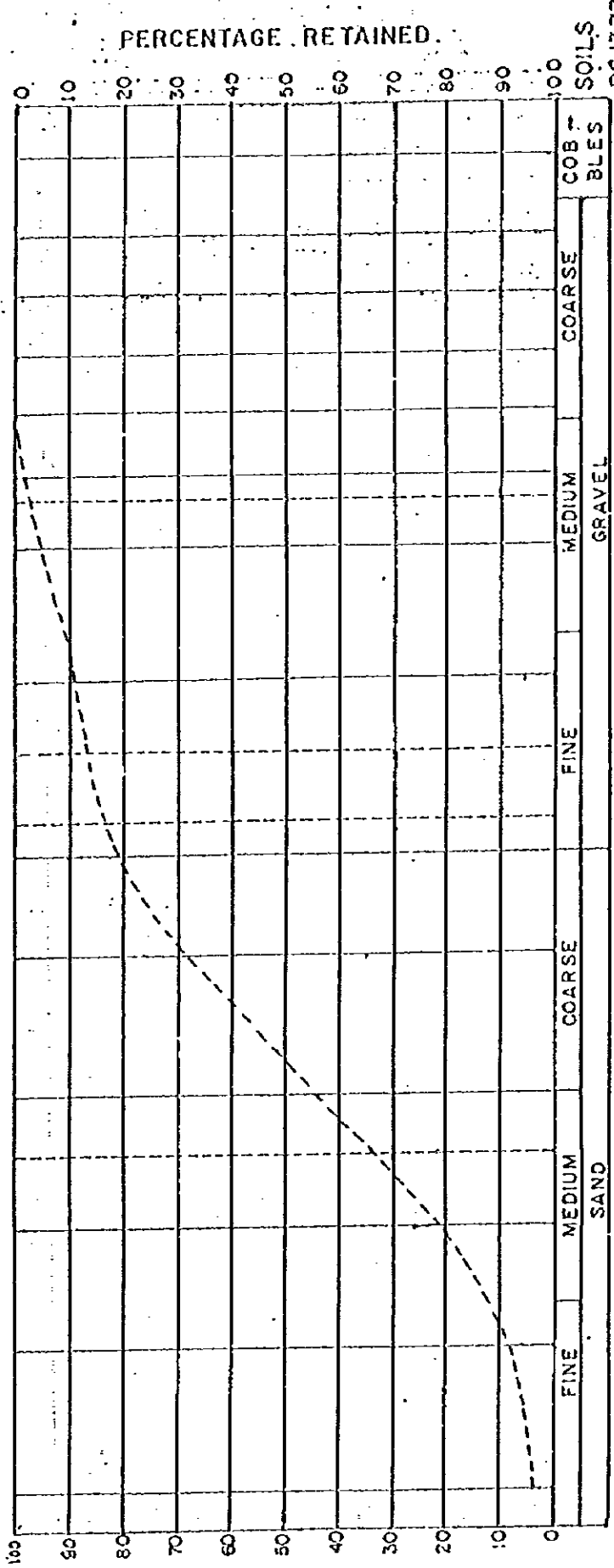
PARTICLE SIZE DISTRIBUTION

SIEVE

200	100	75	50	40	30	16	6	1/4"	1/2"	3/4"	1 1/2"	2"	3"						
0.075	0.15	0.212	0.3	0.425	0.6	1.18	2.36	3.35	5	6.7	10	12.5	14	20	28	37.5	50	75	100

ASTM
BS 410

0.075	0.15	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1	2	3	4	5	6	7	8	9	10	20	30	40	50	60	70	80	90
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PERCENTAGE PASSING

PERCENTAGE RETAINED

FINE SAND			GRAVEL			COARSE SOILS		
FINE	MEDIUM	COARSE	FINE	MEDIUM	COARSE	COARSE	COARSE	COARSE
SAND			GRAVEL			SOILS		

FINE		COARSE	
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AGGREGATE
BS 882

Bore Hole No.: BH 04

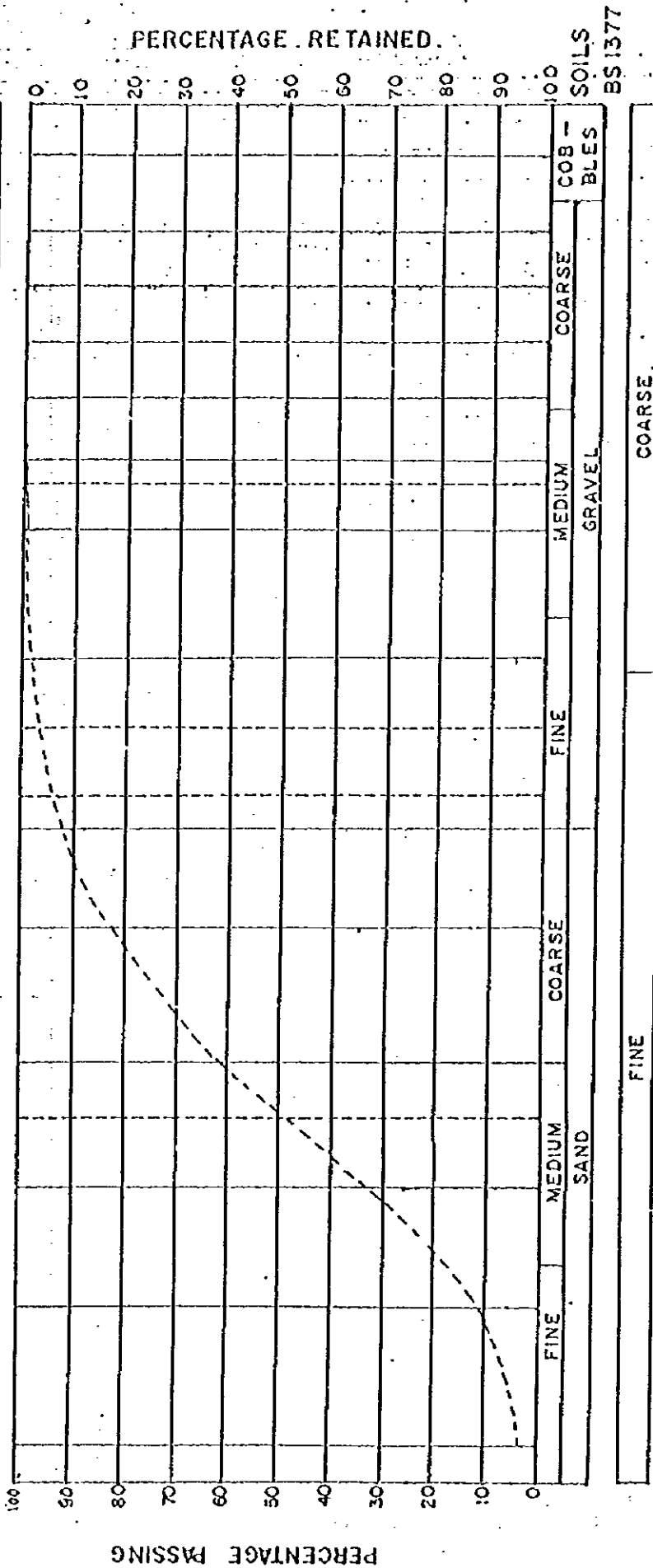
Depth: 3.00 - 3.45

MATERIALS TESTING LABORATORY

PARTICLE SIZE DISTRIBUTION

SIEVE
ASTM
BS410

200	100	75	50	40	30	16	6	1/4"	3/4"	1 1/2"	2"	3"							
0.075	0.15	0.212	0.3	0.425	0.6	1.18	2.36	3.35	5	6.7	10	12.5	14	20	28	37.5	50	75	100
0.075	0.080	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0



AGGREGATE
BS 882
Bore Hole No.: BH 04
Depth: 10.00 - 10.45

MATERIALS TESTING LABORATORY

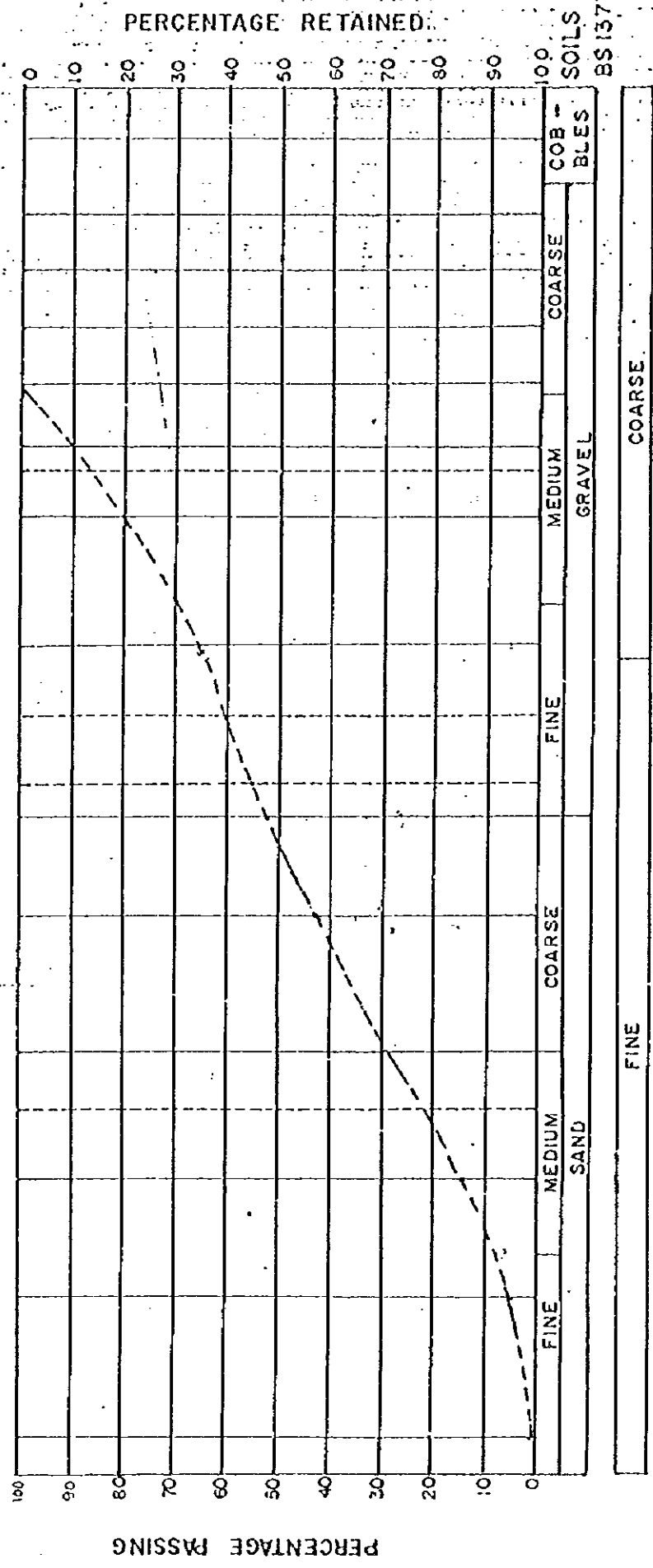
BH 04

Bore Hole No.	BH 04	BH 04	BH 04	BH 04	BH 04	BH 04
Depth (m)	2.00 - 2.45	4.00 - 4.45	5.00 - 5.45	7.00 - 7.45	8.00 - 8.45	9.45 - 10.00
Sieve Size (mm)	Percentage Passing (%)					
19.0	100.0	100.00	100.0	100.0	-	100.0
9.5	79.8	90.5	99.8	98.9	-	98.0
4.75	65.1	88.8	98.1	96.7	100.0	95.0
2.36	55.0	85.6	93.7	93.1	97.3	91.1
1.18	42.2	74.1	80.1	77.1	83.4	86.7
0.600	29.7	56.2	53.5	51.9	60.7	67.1
0.300	14.2	31.4	28.7	25.3	41.4	38.2
0.150	5.8	12.8	10.7	6.3	20.5	16.7
0.075	0.8	1.1	3.8	1.4	4.8	4.6

PARTICLE SIZE DISTRIBUTION

SIEVE
ASTM
BS 410

200	100	75	50	40	30	16	6	1/4"	1/2"	3/4"	1 1/2"	2"	3"
0.075	0.15	0.212	0.3	0.425	0.6	1.18	2.36	3.35	5	6.7	10	12.5	14
0.075	0.080	0.1	0.15	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.18



AGGREGATE
BS 882

Bore Hole No.: BH 04

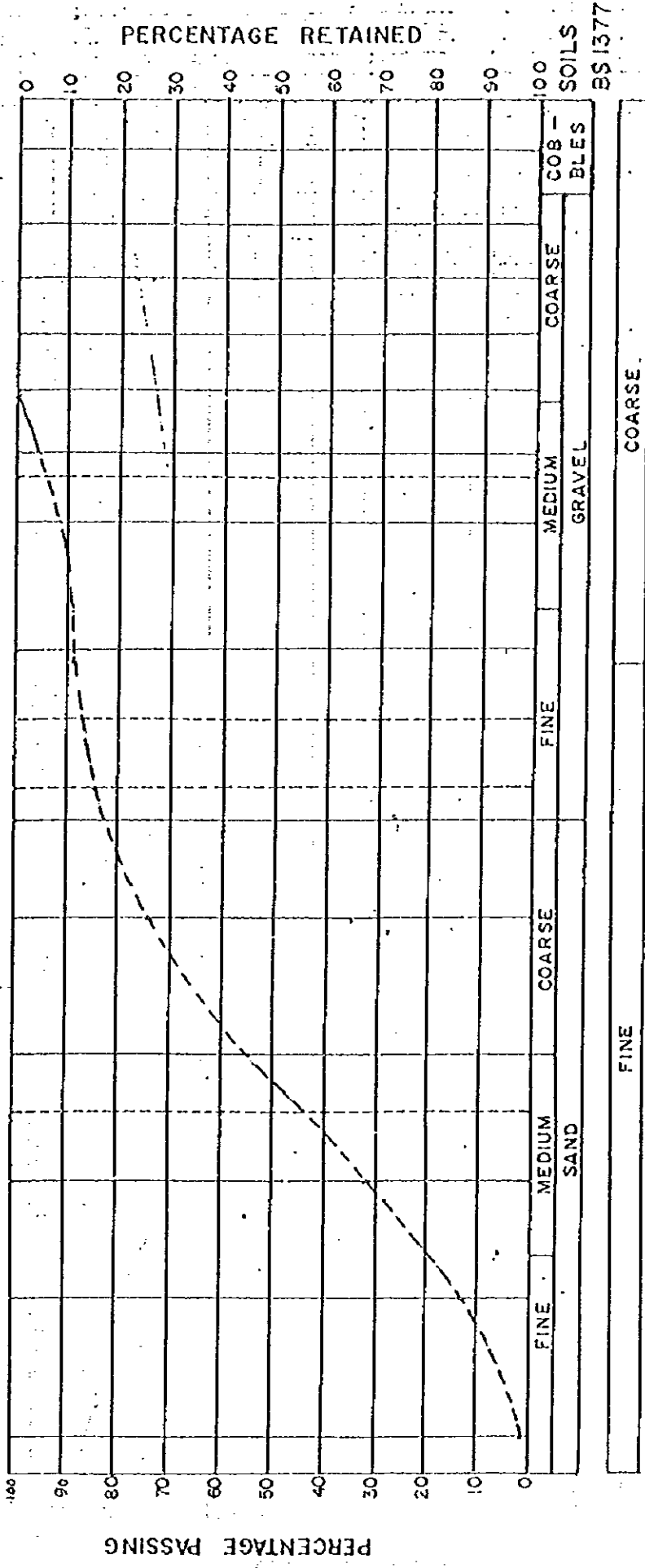
Depth: 2.00 - 2.45

MATERIALS TESTING LABORATORY

PARTICLE SIZE DISTRIBUTION

SIEVE
ASTM
BS 410

200	100	75	50	40	30	16	6	1/4"	3/4"	1 1/2"	2"	3"
0.075	0.15	0.212	0.3	0.425	0.6	1.18	2.36	3.35	5	6.7	10	12.5
0.075	0.08	0.1	0.15	0.25	0.425	0.75	1.18	1.75	2.5	3.75	5	7.5
0.075	0.08	0.1	0.15	0.25	0.425	0.75	1.18	1.75	2.5	3.75	5	7.5



FINE		MEDIUM SAND		COARSE		FINE		MEDIUM GRAVEL		COARSE		SOILS	
FINE		MEDIUM SAND		COARSE		FINE		MEDIUM GRAVEL		COARSE		SOILS	

AGGREGATE
BS 882

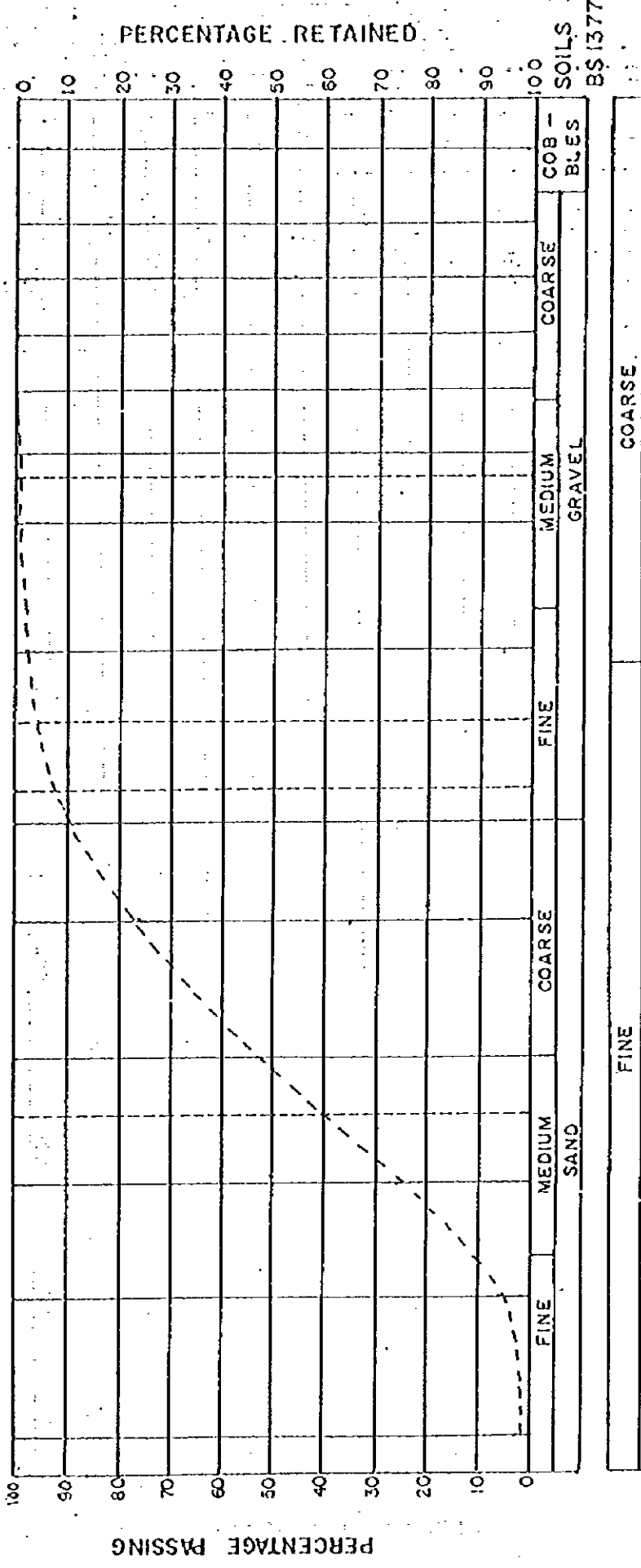
Bore Hole No. : BH 04
Depth : 4.00 - 4.45

MATERIALS TESTING LABORATORY

PARTICLE SIZE DISTRIBUTION

SIEVE

ASTM		BS410	
200	0.075	100	75
100	0.15	75	50
75	0.25	60	40
50	0.425	40	30
40	0.6	30	20
30	1.18	20	16
20	2.36	16	12.5
15	3.55	12.5	10
10	5	10	7.5
7.5	6.7	7.5	5
5	8.5	5	4
4	10.5	4	3
3	12.5	3	2
2	15	2	1.6
1.6	19	1.6	1.18
1.18	25	1.18	0.85
0.85	30	0.85	0.6
0.6	37.5	0.6	0.425
0.425	47.5	0.425	0.3
0.3	60	0.3	0.25
0.25	75	0.25	0.18
0.18	100	0.18	0.15
0.15		0.15	0.106
0.106		0.106	0.075
0.075		0.075	0.053



AGGREGATE

BS 882

Bore Hole No. : BH 04

Depth : 7.00 - 7.45

MATERIALS TESTING LABORATORY

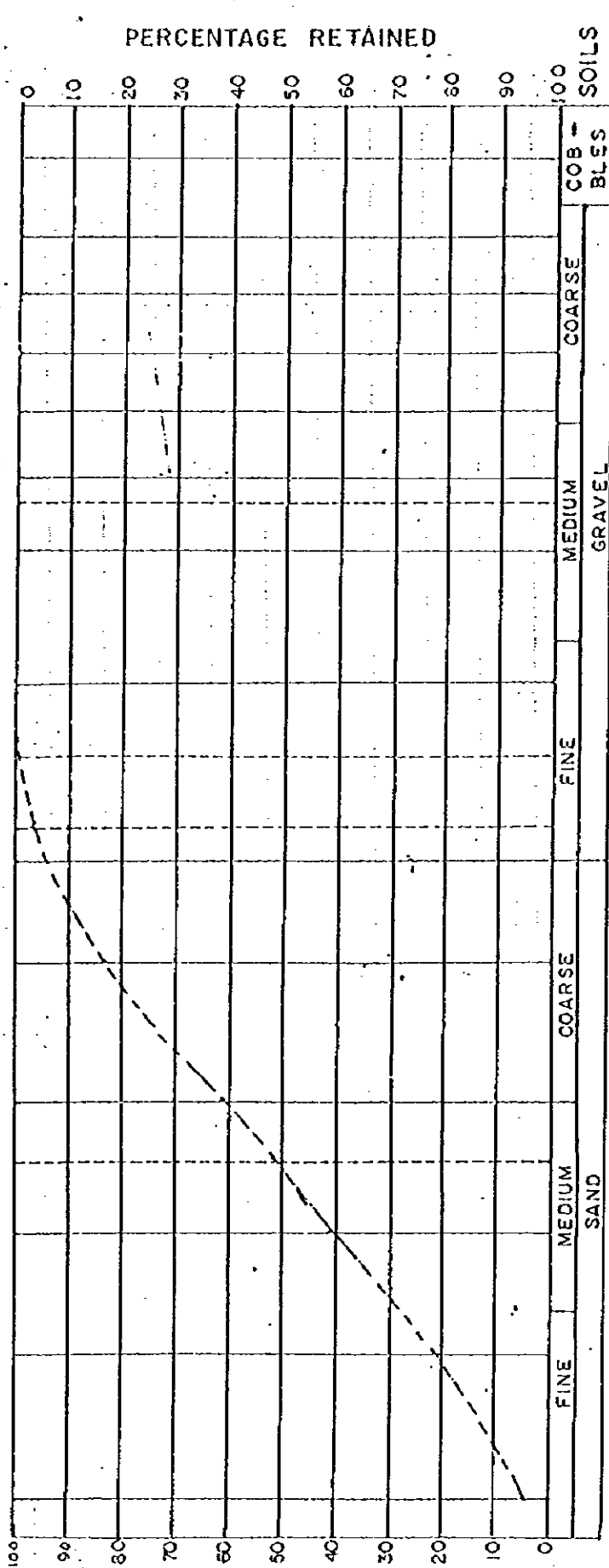
PARTICLE SIZE DISTRIBUTION

SIEVE

200	100	75	50	40	30	16	6	1/4"	1/2"	3/4"	1 1/2"	2"	3"
ASTM													
BS 410													

0.063	0.075	0.15	0.212	0.3	0.425	0.6	1.18	2.36	3.35	5	6.7	10	12.5	14	20	28	37.5	50	75	100
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0.075	0.15	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.18	1.25	1.4	1.6	1.8	2.0	2.5	3.0	3.5	4.0	5.0	6.0	7.0	8.0	9.0	10.0	12.5	15.0	20.0	25.0	30.0	40.0	50.0	60.0	70.0	80.0	90.0	100.0
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FINE SAND	MEDIUM SAND	COARSE SAND
FINE GRAVEL	MEDIUM GRAVEL	COARSE GRAVEL
SOILS	COBLES	AGGREGATE

FINE

COARSE

Bore Hole No. : BH 04

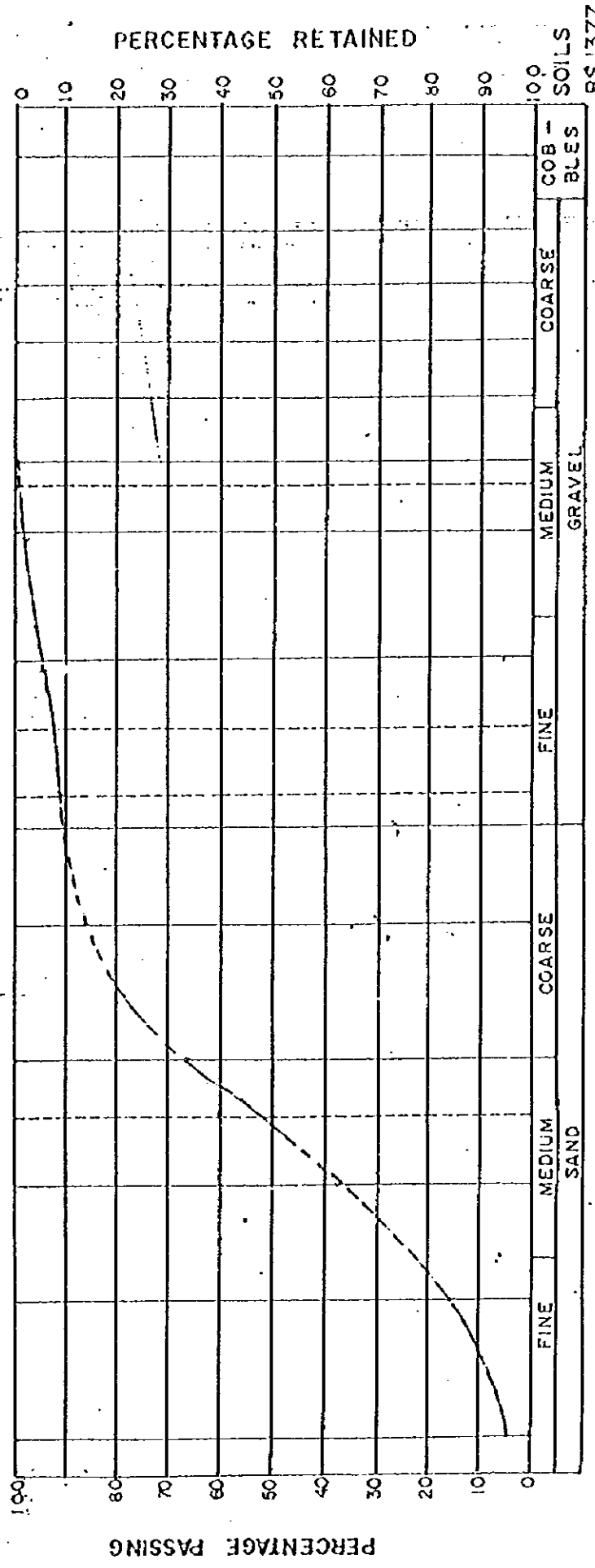
Depth : 8.00 - 8.45

MATERIALS TESTING LABORATORY

PARTICLE SIZE DISTRIBUTION

SIEVE
ASTM
BS 410

200	100	75	50	40	30	16	6	1/4"	1/2"	3/4"	1 1/2"	2"	3"
0.075	0.15	0.212	0.3	0.425	0.6	1.18	2.36	3.35	5	6.7	10	12.5	14
0.075	0.080	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1	1.2	1.5	2
0.075	0.080	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1	1.2	1.5	2



AGGREGATE
BS 882

Bore Hole No. : BH 04

Depth : 9.45 - 10.00

MATERIALS TESTING LABORATORY

2 - 3 土粒子の比重試験結果

3. SPECIFIC GRAVITY

Bore Hole No.	Depth (m)	Specific Gravity
BH 01	1.45 - 2.00	2.58
	5.00 - 5.45	2.65
	6.00 - 6.45	2.65
	6.45 - 7.00	2.64
BH 02	1.45 - 2.00	2.59
	2.00 - 2.45	2.67
	4.00 - 4.45	2.68
	5.00 - 5.45	2.66
	8.00 - 8.45	2.67
BH 03	4.00 - 4.45	2.67
	5.00 - 5.45	2.67
	6.00 - 6.45	2.66
	7.00 - 7.45	2.68
BH 04	2.00 - 2.45	2.60
	4.00 - 4.45	2.67
	5.00 - 5.45	2.64
	7.00 - 7.45	2.63
	8.00 - 8.45	2.64
	9.45 - 10.00	2.61

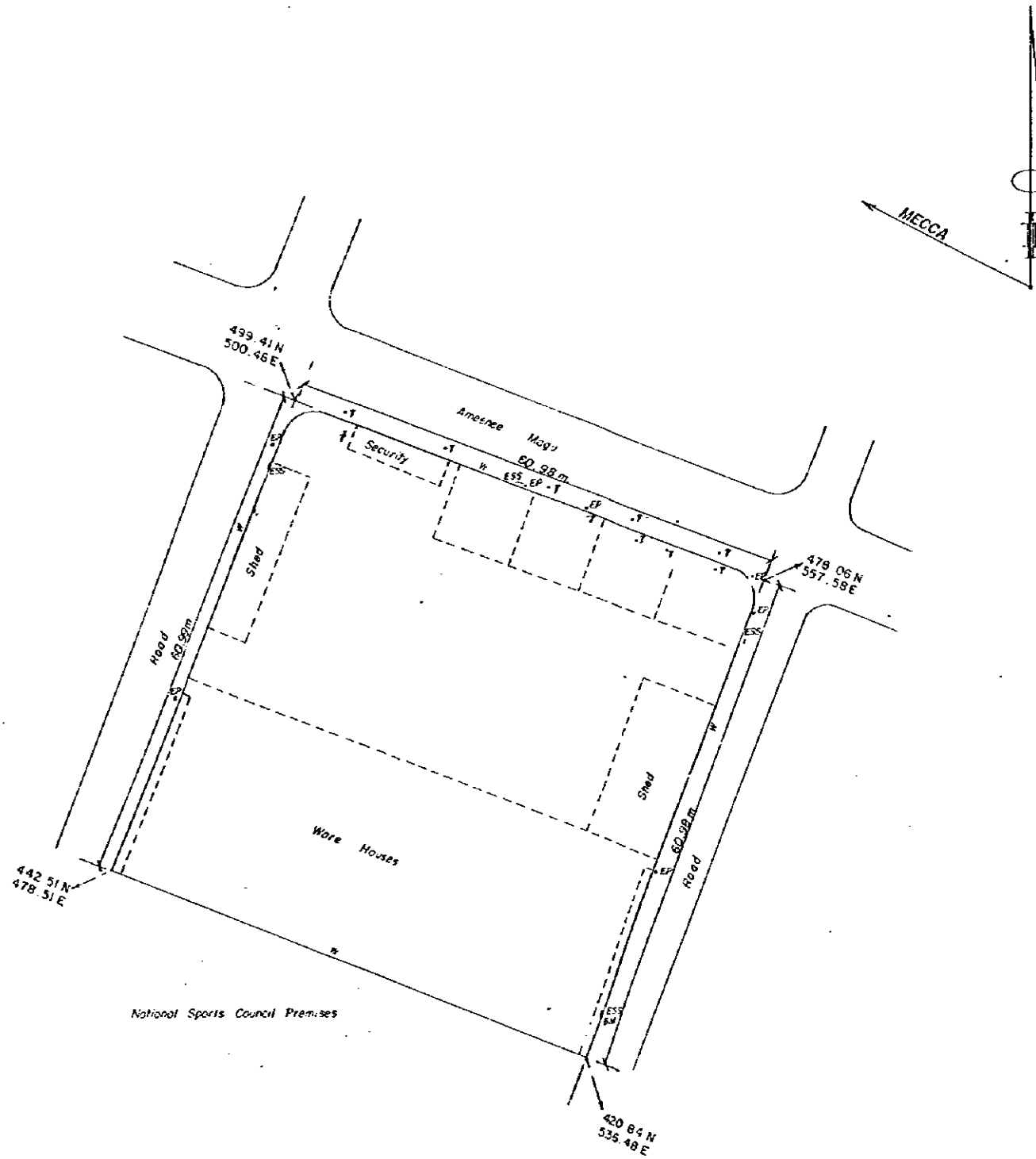
2-4 土の塩化物含有量及び硫酸塩含有量試験結果

4. CHLORIDE AND SULPHATE CONTENT OF SOIL

Bore Hole No.	Sample Depth (m)	Chloride Content (%)	Sulphate Content (%)
BH 01	2.00 - 2.45	0.04	0.50
	3.00 - 3.45	0.06	0.58
BH 02	0.00 - 1.00	0.03	0.62
BH 03	0.00 - 1.45	0.03	0.79
	2.00 - 2.45	0.03	0.40

第 3 章 地形調査結果

3 - 1 敷地測量図



Reference:
 W - Wall.
 EP - Electric Post
 ESS - Electric Sub Station
 T - Tree
 BM - Bench Mark

6TH PRIMARY SCHOOL PROJECT
 AMEENEE MAGU - MALE
 REPUBLIC OF MALDIVES

SURVEYED BY:- L.P.A.S. PERERA
 (LICENSED SURVEYOR & LEVELLER)

SITE SURVEY PLAN

SCALE:- 20m

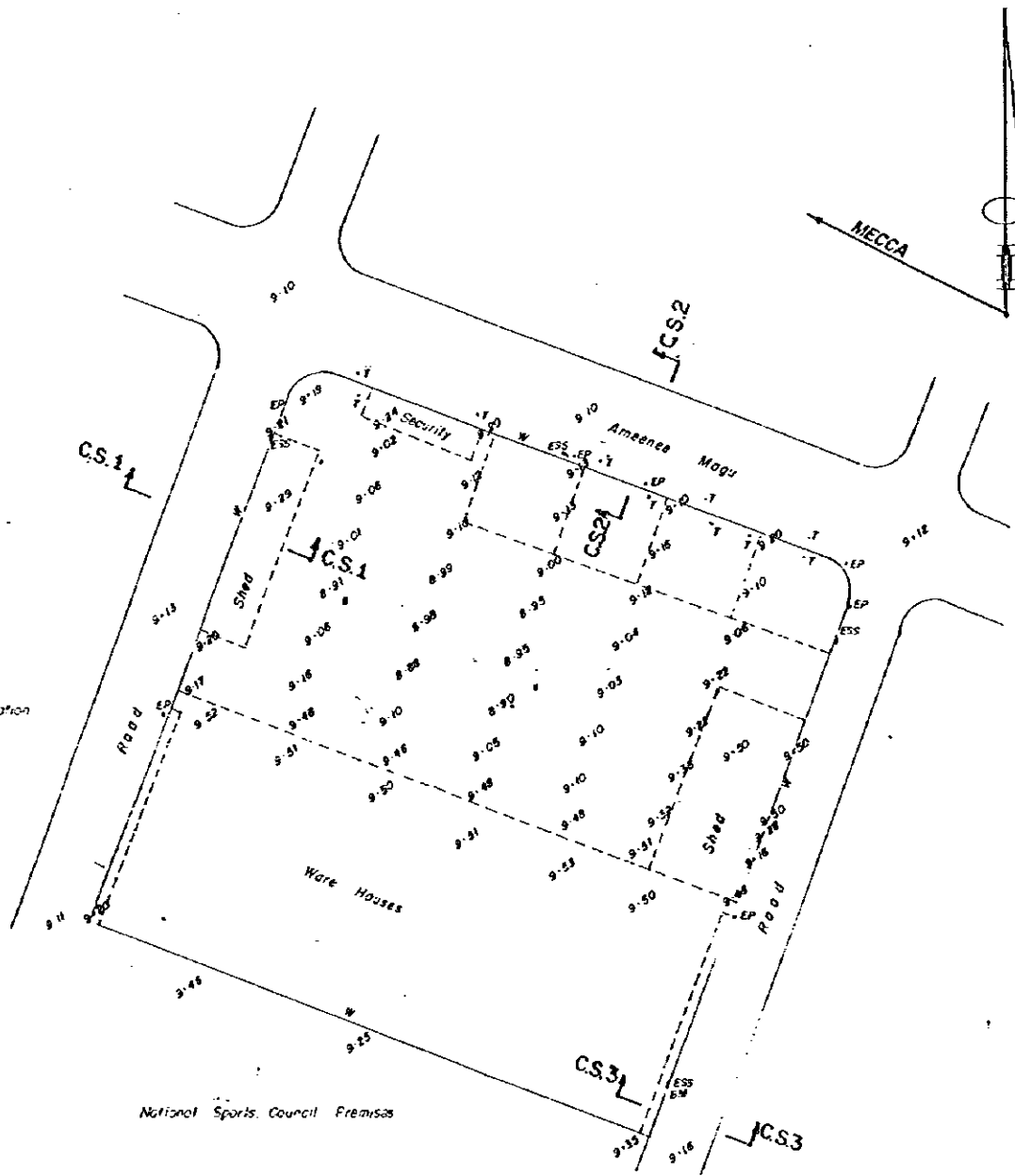
DRAWN BY :- P.J.M. A. FERNANDO
 (AUTHORISED DRAUGHTSMAN)

AUGUST - SEPTEMBER 1997

SOIL ENGINEERING
 AND
DEEPWELLS (PVT.) LTD.

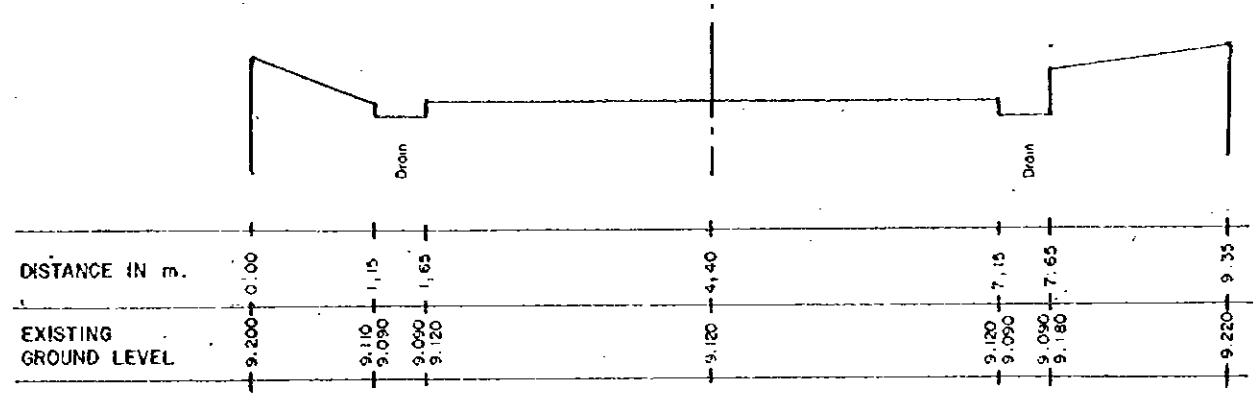
14/15, VAJIRA ROAD,
 COLOMBO-4, SRI LANKA.
 Tel. 94 - 1 - 503703

3 - 2 敷地高低測量図

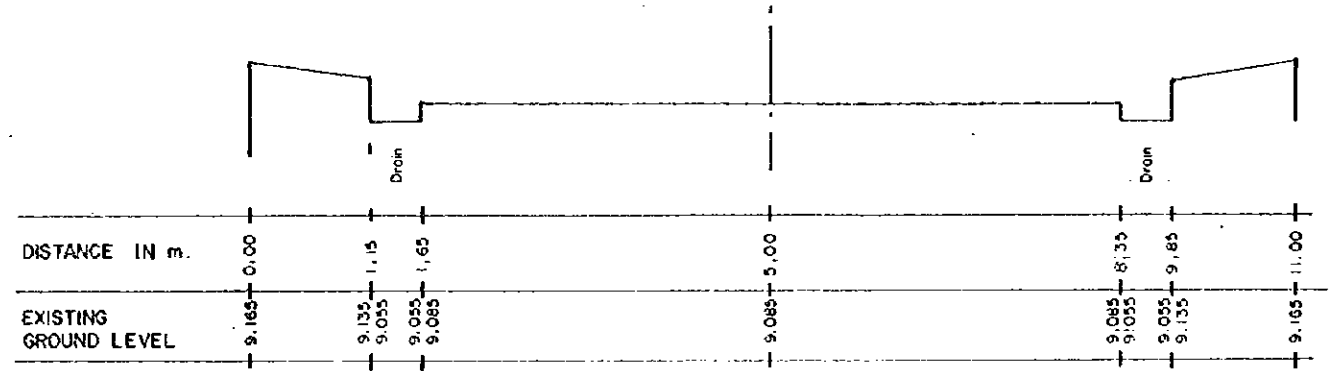


Reference
 W - Wall
 EP - Electric Post
 ESS - Electric Sub Station
 T - Tree
 BM - Bench Mark

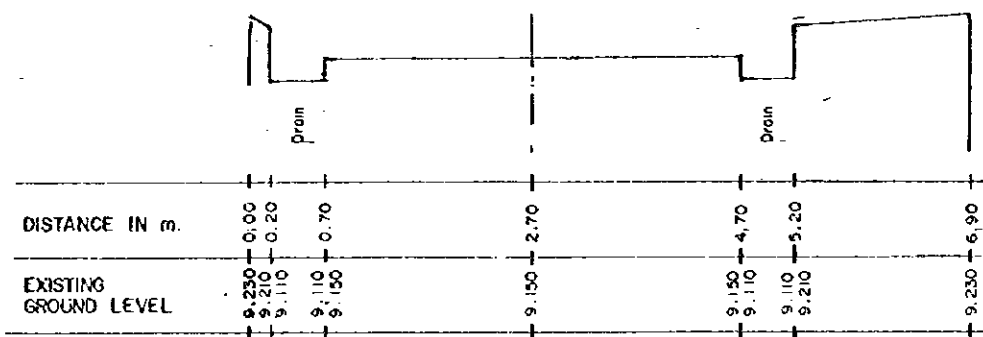
NOTES:-
 ALL LEVELS ARE IN METRES.
 DATUM ARBITRARY.
 BM TAKEN AT THE LOWER HORIZONTAL BASE
 OF THE CABINET OF ESS LEVEL 10.000m.



C. S. 1



C. S. 2



C. S. 3

6TH PRIMARY SCHOOL PROJECT AMEENEE MAGU - MALE REPUBLIC OF MALDIVES	
SURVEYED BY :- L.P.A.S. PERERA. (LICENSED SURVEYOR & LEVELLER)	SITE SURVEY PLAN SCALE:
DRAWN BY :- P.J. M.A. FERNANDO. (AUTHORISED DRAUGHTSMAN)	AUGUST - SEPTEMBER 1997
SOIL ENGINEERING AND DEEPWELLS (PVT.) LTD.	14/15, VAJIRA ROAD, COLOMBO-4, SRI LANKA. Tel. 94 - 1 - 503703



JICA